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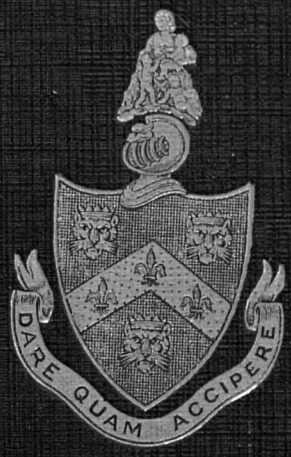

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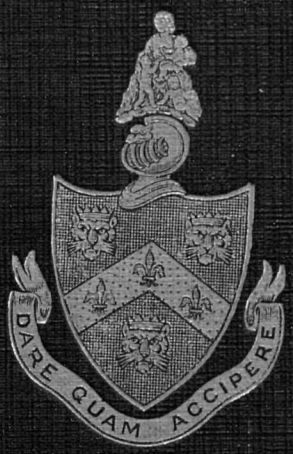

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INDEX.

PAGE

A

Addiscott, Miss 113
Adenitis, Tuberculous, A Plaster Neck Splint for the Treatment of, by H. A. Ripman 361
Age and Experience, by H. L. Messenger .. 58
Air Raids, Damage to Hospitals 301
"America Revisited," by W. H. Ogilvie 158, 207, 221, 254, 267
Anal Canal, Painful Affections of, by S. H. Wass 110
Apologia Pro Barba Sua 76
Appointments 14, 126, 156
Artificial Limbs, Notes on the Fitting of .. 76
Athletics, Sports at Tunbridge Wells 213
Atkins, H. J. B.—
Burns 320
Lessons from Dover 192
A Word of Praise and a Little Grumble .. 85

B

Beale, Mr. 161
Bezold's Mastoid, A Case of Deep Cervical Abscess Simulating, by C. de W. Gibb .. 360
Briggs, John, Death of 80
Births 64, 78, 140, 156, 214, 226, 256, 268, 280, 298, 318, 368, 378
Blues, Award of 213
Bonar, T. G. D., Obituary 186
Boxing 239
"Broadway" 84
Burgess, N. F. C., Obituary 344
Burns, by H. Atkins 320
Brock. R.C. War Injuries of The Chest. 270

C

Cameron, H. C.—
Congenital Syphilis 174
Tuberculosis: The Fall in the Death-Rate 242
Carter, D. M., Minor Injuries to the Fingers .. 142
Case of Old Boggins 131
Cerebro-Spinal Meningitis, by N. Mutch .. 282
Cervical Abscess, Deep, Simulating Bezold's Mastoid, by C. de W. Gibb 360
Change of Address 14, 30, 48, 64, 78, 92, 108, 126, 140, 156, 170, 184, 200, 214, 226, 240, 256, 268, 280, 298, 318, 332, 342, 356, 368
Chest—
Penetrating Wounds of, by J. A. Ryle .. 258
War Injuries of, by R. C. Brock 270
Christmas in the Workhouse 10
Clewer, Colonel Donald, Promoted Major-General 344
Clinical Lectures—
R. C. Brock:
War Injuries of the Chest 270
Lancelot Bromley:
Intra-Peritoneal Abscess 16

PAGE

Clinical Lectures—*continued.*
H. C. Cameron:
Congenital Syphilis 174
F. N. Doubleday:
Cases of Gunshot Wounds of the Jaws, Treated 1914-1918 358
A. H. Douthwaite:
Pyrexia of Unknown Origin 228
Sick Headaches 334
Nils L. Eckhoff:
Injuries of the Face 300, 345
Varicose Veins 2
L. Forman:
Some Skin Diseases Common in War Time 370
R. T. Grant:
Effort Syndrome 216
N. Mutch:
Cerebro-Spinal Meningitis 282
J. A. Ryle:
Penetrating Wounds of the Chest .. 258
Clinical Teaching 127
The Future of 31, 49
Correspondence—
"Anisocytosis":
Hæmatology and Patience 75
Thos. Barlow:
Royal Medical Benevolent Fund .. 341
J. S. Batchelor:
Orthopædic Surgery and Fractures .. 151
S. L. Binderman:
United Hospitals Magazine 75
P. M. F. Bishop:
Air Raid Duties 211
Appointment of House Officers .. 24
"Criticism." A Reply 196
Guy's Under Fire 279
"Our Park" 151
"Rest Periods" 326
The Emergency Bed Service 73
R. C. Brock:
Guy's Hospital Reports 150
State Aid and Clinical Research .. 103, 166
War Wounds of the Chest 315
H. Brooke:
The Ministry and Medical Students .. 44
W. Mark Brown:
Evacuees 212
J. C. Bulstrode:
"Selection of Rugby Players" .. 137
D. W. Burgess, G. E. McFall and E. Robinson:
The Physical Society Meetings .. 280
H. Charles Cameron:
Teaching and Parliament 74
Maurice Campbell:
Wills' Library: Valuable Books .. 316
— Carfax:
Clinical Teaching and Research .. 136
S. A. Coffey:
Guy's Cricket Club 199
D. H. Cook, A. Charlton, J. T. Jenkins and O. Halamandres:
A Game of Bridge 354

PAGE

Correspondence—*continued*
Frank Cook :
Au Revoir ! 24
S. De Navasquez :
Clinical Research 135
H. Elliot-Blake :
Research and Inoculation 137
Walter Elliott :
The Ministry and Medical Students.. 44
Richard W. B. Ellis :
Children's Ward at Pembury 24
P. R. C. Evans and Others :
First-Year Students 375
" Even More Harassed O.P.O." 199
Ex Rure Salus :
Our Park 138
Jno. Eyre :
Hospital Routine in Air Raids .. 280
R. Gillespie :
State Aid and Clinical Research .. 102
E. D. Grasby :
Sector News 326
Hilda M. Gration :
The Future of Clinical Teaching .. 74
J. H. G. Halliday :
Health Among the Staff 328
T. H. Hills :
Starlings Review 267
Raymond T. Hinde :
Guy's Treasures 298
C. C. Holman :
Guillotine Amputations 236
H. E. Hutton :
A Clinical Case.. 294
N. M. Jacoby :
Guy's Nurses at Pembury 353
" Military Medical Service " 137
D. W. James :
The Young Surgeon After the War .. 266
Brian D. Johnson :
The Starlings' Review.. 253
Maureen Kelsey :
Military Medical Service 117
G. W. Goodhart :
Clinical Teaching and Research .. 116
F. A. Knott :
The Hæmatological Laboratory .. 137
T. B. Layton :
Second Thoughts on Returning to Guy's.. 11
Sir Astley Cooper's Lectures on Anatomy 266
The Hippocratic Oath.. 169
Windsor Lewis :
Guy's Reunion Dinner 118
Lieutenant, 28th D.A.M.S. :
Military Service 153
F. G. Lloyd :
The Take-In System 42
Emily P. MacManus :
" Thanks " 225
Alan Marsh :
The Future of Medicine 293
J. H. Mayer :
The Woolstone Heel 237
G. O. Mitchell :
The Wills' Library Books 354
" Modfrey Lynne " :
Love 254
D. H. Norman :
Guy's Hospital Photographic Society.. 154

PAGE

Correspondence—*continued*
W. H. Ogilvie :
Guillotine Amputations 212
" Poikilocyte " :
Doctors of the Future 43
H. A. Ripman :
The Physical Society 316
Ian G. Robin :
" Lessons from Dover " 225
John A. Ryle :
The Future of Clinical Teaching .. 61
" Scandalised and Nearly-Qualified " :
Appointment of House Officers .. 11
J. W. Shackle :
Medical Diseases of War 181
R. E. Smith :
Pneumococcus and Streptococcus .. 237
T. H. Spencer Smith :
Ladies in the College 316, 341
W. R. Spurrell :
" Too Much College " 328
" Stanley " :
Guy's of Forty Years Ago 168
P. H. Staple :
The Dental School 91
J. Van A. Steytler :
Farewell ! 253
F. J. R. Stoneham :
The Coroner and Inquests 43
" Student " :
" Criticism " 181
" Subscriber " :
Selection of Rugby Players 118
R. B. Sutcliffe :
The Take-In System 62
P. N. Swift :
The Medical and Dental Schools .. 152
Florence Taylor :
Nurses' Training at Guy's 341
R. H. S. Thompson :
Pellagra and the Vitamin B_2 Complex 24
E. J. Tucker :
The Farnborough Reference Library.. 317
F. Douglas Turner :
The Young Surgeon After the War .. 266
" Two Students " :
" Criticism " 198
S. H. Wass :
Ladies in the College Dining Room .. 327
Orthopædic Surgery and Fractures .. 167
Daniel Whiddon :
The Young Surgeon After the War .. 317
Harley Wimpole :
" Love " 225
George Winston :
The Wills' Library 26
G. Payling Wright :
State Aid and Research 71
" 1923 " :
Complacency 76
Cox, A. Neville, Obituary 128
Cricket—
Fixtures, 1940 139
v. Bromley C.C. 214
v. Private Banks 170
v. Richmond Town C.C. 214
v. The Wanderers 182
Crone, J. S., Obituary 142
Cross, F. G., Obituary 344
Cross-Country Running 125
United Hospitals 107

PAGE
Crossword 13
Crossword Puzzles 1

D

Dartford Letter, Joyce Green 7, 57, 71, 90, 101, 135, 252, 264, 293
Davies, A. H., Obituary 110
Davies, E. R., A Simple Rubber Cushion for Walking Plasters 220
Deaths .. 64, 78, 92, 126, 140, 156, 170, 184, 214, 226, 256, 280, 298, 342, 356, 368, 378
Dental Society—
B. M. C.:
An Experience with a Lower Third Molar 97
Presidential Address Delivered by H. L. Messenger 58
J. R. Ratcliffe:
The Romance of Dentistry 85
Douthwaite, A. H.—
Pyrexia of Unknown Origin 228
Sick Headaches 334
Dover, Lessons from, by H. J. B. Atkins .. 192

E

Eckhoff, Nils L.—
Injuries of the Face 300, 345
Erratum 370
Varicose Veins 2
Effort Syndrome, by R. T. Grant 216
Emergency Medical Service 15
Recent Changes in 59
Engagement 126, 184
Erskine, David, The Diagnosis of Diseases of the Skin 128
Evacuee Children 202

F

Face, Injuries to, by Nils L. Eckhoff 300, 345
Erratum 370
Farnborough Letter 8, 42, 70, 224, 231, 253, 264, 278, 293, 315, 325, 341, 351, 363, 374
Fingers, Minor Injuries to, by D. M. Carter .. 142
Football—
Rugby:
Fixtures, 1940-41 356
Season, 1939-40 182
Statistics and Charts, Season 1939-40 183
v. Aldershot Command 106, 377
v. An Army XV 29
v. Bedford 46
v. Catford Bridge 46
v. Gloucester 124
v. King's College Hospital 376
v. London Hospital 123, 331
v. London Welsh and London Irish .. 123
v. Metropolitan Police 355
v. Middlesex Hospital 355
v. Oxford University 77
v. Rosslyn Park 155, 378
v. St. Bartholomew's Hospital ..317, 377
v. St. Mary's 124, 377

PAGE
Rugby—*continued*
v. The Hogs 123
v. University College Hospital and Cardiff Medicals 122
v. Wasps 46, 138
Forman, L., Some Skin Diseases Common in War Time 370
France, May and June in, by J. N. H. 233

G

Gazettes to Censorable Countries 258
G. E. H. E., A Touch of Variety 180
Gibb, C. de W., A Case of Deep Cervical Abscess Simulating Bezold's Mastoid .. 360
Gillespie, R. D., Psychology for Dental Students 32
G. L. D., Thoughts After Leaving Guy's .. 22
Gordon, John, A Case of Strangulated Inguinal Hernia in a Child of Five Weeks .. 290
Grant, R. T., Effort Syndrome 216
Great Libel Case of 1828 80
Gunshot Wounds of the Jaws Treated 1914-1918, by F. N. Doubleday 358
Guy's of Forty Years Ago—Some Reminiscences, by H. Crewe Keates 144
Guy's Hospital Reports 142
Guy's Letter 6, 19, 40, 56, 69, 89, 100, 115, 132, 149, 161, 179, 195, 208, 224, 231, 252, 264, 278, 291, 314, 325, 341, 350, 362, 374
Guy's, Thoughts After Leaving, by G. L. D. .. 22
Gymnasium 80

H

Hæmatology, An Exercise in, or a Blood Count on Sunday Afternoon 61
Harley, H. A., Notes on Peripheral Nerve Injuries 262, 288, 338, 351
Headaches, Sick, by A. H. Douthwaite .. 334
Hernia, Inguinal, Strangulated, A Case of, in a Child of Five Weeks, by John Gordon .. 290
Hill, Lieut. A. E., Death of 65
Homfray, E. R. P., Obituary 358

I

Injuries to the Face, by Nils L. Eckhoff ..300, 345
Erratum 370
Inflammations of the Middle Ear Cleft, by T. B. Layton 202
Insulin Substitutes—Résumé of Present-day Knowledge, by G. R. W. N. Luntz .. 285
Intra-Peritoneal Abscess, by Lancelot Bromley 16

J

Jaws, Gunshot Wounds of, Treated 1914-1918, by F. N. Doubleday 358
J. N. H., May and June in France 233

K

Keats, H. Crewe, Guy's of Forty Years Ago—Some Reminiscences 144
Kent-Hughes Cup 107, 125
Keppel-Compton, J. H., Obituary 110

PAGE

L

Laidlaw, Sir Patrick, Death of 93
Lake, Lieut. F. B. 202
Lament from the Provinces 22
Laws of the Take-In 55
Layton, T. B.—
  Inflammations of the Middle Ear Cleft .. 202
  Posture as a Therapeutic Measure.. .. 51
  Review of "Too Much College," A Correction.. 320
  The Young Surgeon After the War—A Rejoinder 276
Leibel, Bernard, The Treatment of Respiratory Emergencies 94
Libel Case of 1828 80
Limbs, Artificial, Notes on the Fitting of .. 76
"Love," by Modfrey Lynne 209
Lower Third Molar, An Experience with .. 97
Luntz, G. R. W. N., Insulin Substitutes—Résumé of Present-day Knowledge .. 285
Lynne, Modfrey, "Love" 209

M

Maggs, W. A., Obituary 50
Marriages 14, 64, 78, 92, 140, 170, 184, 200, 214, 226, 240, 256, 268, 280, 298, 332, 342, 356, 368, 378
M. B., A Word of Praise and a Little Grumble.. 85
M. E. F., Nursing Education 238
Messenger, H. L., Age and Experience .. 58
Middle Ear Cleft, Inflammations of, by T. B. Layton 202
Ministry of Health, Appointment of Clinical Assistants in Pathology 370
Molar, Lower Third, An Experience with .. 97
Mutch, N.—
  Cerebro-Spinal Meningitis 282
  Some Methods of Oxygen Administration—
  —Essential Data 189
  A Correction.. 202

N

National Union of Students 104
Nerve Injuries, Peripheral, by H. A. Harley 262, 288, 338, 351
Neuroses, Treatment, by C. H. Rogerson .. 66
Notices—
  Beit Memorial Fellowships for Medical Research 92
  Clinical Lectures 139
  Final F.R.C.S. 13
  Genito-Urinary Department 139
  Guyoscopes for Sale 298
  House Officers 108
  Mr. T. B. Layton's Consulting Room .. 342
  Leverhulme Research Scholarships, 1940.. 30
  Nuffield House for Paying Patients .. 13
  Series of Lectures by Professor J. A. Ryle.. 139
  Society of Apothecaries of London—Dates of Examinations 125, 155, 200, 268, 332, 356, 378
  The Dental Society 64
  Skin Out-patients 30
  This Medicine 139
  University of London :
    M.B., B.S. Examination 47
    Second Examination for Medical Degrees 47
Nuffield House 2
Nursing Education, by M. E. F. 238
Nursing News 9, 21, 42, 125, 139, 155, 219
  From All Fronts 108
  Replacement of Kit 270

O

Obituary—
  T. G. D. Bonar 186
  N. F. C. Burgess 344
  A. Neville Cox 128
  J. S. Crone 142
  F. G. Cross 344
  A. H. Davies.. 110
  E. R. P. Homfray 358
  J. H. Keppel-Compton 110
  W. A. Maggs 50
  P. G. Stainton 110
  F. J. Steward 172
Ogilvie, W. H., America Revisited 158, 207, 221, 254, 267
Old Boggins, The Case of 131
Orpington 131
Orpington Letter .. 9, 20, 40, 57, 71, 101, 133, 150, 162, 179, 195, 208, 224, 231, 253, 264, 279, 315, 351, 363
Out-Patients' Department, Time Table for New Patients 12
Oxygen Administration, Some Methods of—
  Essential Data, by N. Mutch 189
  A Correction.. 202

P

Papers by Guy's Men 14, 48, 64, 92, 108, 126, 140, 156, 170, 184, 214, 226, 240, 268, 280, 318, 332, 342, 356, 368, 378
Passim 1, 15, 31, 49, 65, 79, 93, 109, 127, 157, 171, 185, 201, 215, 227, 241, 257, 281, 299, 319, 334, 343, 357, 369
Pass List—
  Conjoint Board .. 14, 47, 126, 226, 240, 332
  Royal College of Physicians, M.R.C.P. 78, 140, 240
  Royal College of Surgeons :
    F.R.C.S. 14, 92
    L.D.S. 48, 92, 156, 240, 342, 356
  Society of Apothecaries of London 14, 48, 92, 140, 184, 214, 226, 268, 332
  University of Cambridge :
    Diploma in Medical Radiology and Electrology 140
    M.B., B.Ch. 13
  University of London :
    B.D.S. 13, 268
    D.Sc. 47
    M.B., B.S. 30, 125, 184, 240, 256, 342, 356
    M.D. 30, 240
  University of Oxford :
    B.M., B.Ch. 14, 30, 200, 226
    M.A. 226
Pembury Letter .. 7, 20, 41, 56, 70, 89, 100, 115, 132, 149, 161, 179, 195, 208, 224, 231, 252, 264, 279, 292, 314, 325, 341, 351, 363, 374

PAGE

Peripheral Nerve Injuries, by H. A. Harley 262, 288, 338, 351
Plaster Neck Splint for the Treatment of Tuberculous Adenitis, by H. A. Ripman 361
Posture as a Therapeutic Measure, by T. B. Layton 51
Preston Hall Letter 232
Prisoners of War (*see* Roll of Honour)
Psychiatric Clinic, York 16
Psychology for Dental Students, by R. D. Gillespie 32
Pyrexia of Unknown Origin, by A. H. Douthwaite 228

R

Ratcliffe, J. R., The Romance of Dentistry .. 85
R. E. R., Apologia Pro Barba Sua 76
Reeve, E. B., Appointed to Brompton Hospital 16
Respiratory Emergencies, The Treatment of, by Bernard Leibel 94
Reviews—
Allen, The Sexual Perversions and Abnormalities 308
Bailey:
Physical Signs in Clinical Surgery .. 45
Surgery of Modern Warfare 365
Barnard, Elementary Pathological Histology 121
Beaumont, Diathermy 91
Beeston, Conjoint Finals 120
Boydon, Income Tax for Medical Practitioners 375
Burke, Venereal Diseases 366
Burrows and Coltart, Treatment by Manipulation 63
Cooke, Special Tests and their Meanings .. 29
Cullinch, Handbook for Dental Nurses .. 120
Dahlberg, Statistical Methods for Medical and Biological Students 313
Dilling, The Pharmacology and Therapeutics of the Materia Medica 311
Fairbrother, A Textbook of Bacteriology .. 330
Farnworth, Roller and Triangular Bandaging 63
Farquharson, Illustrations of Surgical Treatment 27
Frazer and Stallybrass, Textbook of Public Health 119
Glover, The Psychology of Fear and Courage 309
Groves, Buildale and Nixon, Textbook for Nurses 148
Gunn, An Introduction to Pharmacology and Therapeutics 329
Guy and Linklater, Hygiene for Nurses .. 120
Hamilton, A Guide to Ophthalmic Operations 121
Handfield-Jones, Surgery of the Hand .. 310
Harries and Mitman, Clinical Practice in Infectious Diseases 213
Henderson and Gillespie, Textbook of Psychiatry 330
Hurst, Medical Diseases of War 146, 163
Hutchison and Hilton, Index of Treatment 312
James and Pickling, Injuries of the Jaws and Face 311
Jamieson, Illustrations of Regional Anatomy (Section VI, Upper Limb) .. 120
Leacock, Too Much College, or Education Eating Up Life 305
A Correction 320

PAGE

Reviews—*continued*
Love, Minor Surgery 45
Maguire, The Anatomy of the Female Pelvis 313
Marshall, Elementary Bacteriology and Immunity for Nurses 121
Miller, The Neurosis of War 309
Morris, Physiotherapy in Medical Practice 119
Mothersole, Plain Verse and Random Rhymes 28
Norton, Preliminary Questions and Answers 63
Oakes, Illustrations of Bandaging and First Aid 29
Ogilvie, Wound Infection 368
Ormerod, Tuberculosis of the Upper Respiratory Tracts 10
Parfitt and Herbert, Operative Dental Surgery 28
Rawling, Landmarks and Surface Markings of the Human Body 329
Roberts, Surface Anatomy 121
Ross, A Handbook of Radiography .. 329
Ryffel, Aids to Forensic Medicine 122
Stead, Elementary Physics 313
Stopes, Prevention of Venereal Disease .. 331
Trotter, Instincts of the Herd in Peace and War 309
van Rooyden, Muir's Bacteriological Atlas 63
Wakeley, Rose and Carless's Manual of Surgery 312
Walshe, Diseases of the Nervous System .. 311
Wansborough, Textbook of Dietetics and Cookery for Nurses 28
War Wounds and Air Raid Casualties .. 310
Watson, A Handbook for Nurses 148
Watson-Jones, Fractures and Other Bone and Joint Injuries 118
Whitnall, The Study of Anatomy 62
Wolff, The Anatomy of the Eye and Orbit .. 314
Worster-Drought, Neuro-Syphilis 330
Ripman, H. A., A Plaster Neck Splint for the Treatment of Tuberculous Adenitis .. 361
Rogerson, C. H., Treatment of Neuroses .. 66
Roll of Honour—
Awards 226, 240, 280, 318
Prisoners of War 256, 298, 342, 378
Romance of Dentistry, by J. R. Ratcliffe .. 85

S

Sailing Club 47
Sector News 6, 19, 40, 56, 69, 89, 100, 115, 132, 149, 161, 179, 195, 208, 224, 231, 252, 264, 278, 292, 314, 325, 340, 350, 362, 374
Salomons Centre 32
Services, The, Roll of Honour, *see* Roll of Honour.
"Ship" 96
Sick Headaches, by A. H. Douthwaite 334
Skin Diseases in War Time, by L. Forman .. 370
Skin, Diagnosis of Diseases of, by David Erskine 128
S. M., Notes on the Fitting of Artificial Limbs .. 76
Squash Courts 80
Squash Rackets Club 256
Stainton, P. G., Obituary 110
"Stanley," This Medicine 364
Starlings' Revue 7, 69

PAGE

Steward, F. J.—
Obituary 172
Some Memories of 187
Syphilis, Congenital, by H. C. Cameron .. 174

T

The Rubaiyat Revised 105
The Trap 83
These Night Raids 6
This Medicine 2, 19, 39, 54, 69, 80, 97, 113, 150, 163, 199, 209
This Medicine, by "Stanley" 364
Thoughts After Leaving Guy's, by G. L. D. .. 22
Time Table for New Patients in Out-Patients' Department 12
Touch of Variety 180
Tuberculosis—The Fall in the Death-Rate, by H. C. Cameron 242

U

United Hospitals—
Cross-country 107
Hare and Hounds 125

PAGE

V

Varicose Veins, by N. L. Eckhoff 2

W

Walking Plasters, A Simple Rubber Cushion for, by E. R. Davies 220
War Injuries of the Chest, by R. C. Brock .. 270
Ward Changes 1
Wass, S. H., Painful Affections of the Anal Canal 110
Wells, Alfred George, Death of.. 80
Whiddon, Daniel, The Young Surgeon After the War 248
"Whitbread" 130
Worth It 155
Wounds of the Chest, Penetrating, by J. A. Ryle 258

Y

York Psychiatric Clinic 16
Young Surgeon After the War—
By T. B. Layton 276
By Daniel Whiddon.. 248

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PASSIM

A SOUND now unfamiliar to our ears has been heard again at the Hospital. That creature which had retired, weary but satisfied, to its dusty den is now at large again. It had well earned its brief but contented rest, for its task had proved arduous ; it had roused public opinion, but Hospital Committees were not so easily moved. Then, so soon after its ambition had been realised, came the War, cruel, destructive, spoiling what is best. Our creature has never yet been seen, but we believe it is a bird, a bird with a long thin beak and a plaintive, piercing cry which pleads for its charges. It is often about in the Borough, where not only does it bring its little burdens, but watches over them till they are well set along life's way. Its frequent plea now tells us it is not satisfied again.

When war broke out, expectant mothers and most of the children left their homes ; so welfare centres closed, Victoria closed, and Caleb and Diplock closed. Now the children are back again in their hundreds, and find their schools still full of A.R.P., their homes harassed by food-rationing, and their Hospital unable to receive them. Although all the other special departments have been given beds in the Hospital, none are allotted specifically for children. Under the general physicians and surgeons, a few cots are allowed in the wards, but do not meet with the greatest approval. Salomon's Centre has been cleverly adapted into a maternity unit with a fully equipped operating theatre, but with only few beds to deal with all the emergencies on the District ; the Externs have had a field day. All things considered, the children have had a bad deal. The Stork is justified in its complaint. We do not deplore the fact that the Children's and Maternity work has been allowed to lapse ; under the circumstances it was inevitable. We are grieved however, when this state of affairs is allowed to remain unchanged when other departments of the Hospital are returning to a more normal régime.

▭

IN our last issue we published the tenth of our present series of Crossword Puzzles. These, as we think you will agree, have been composed with great skill and ingenuity. They have varied in difficulty, and as a result the number of correct solutions we have received has varied. We have always been amused by the clues (particularly did we like . . , which being interpreted is " transverse colon "), though our editorial brains have been unequal to fathoming many of them without reference to the solution. For the present we have decided to give " Pepsin," our crossword seer, a rest so that he may recuperate from his great labours, and later, if he is still willing, return to even greater deeds. Shall we let you into the secret of that gastric, enzymatic pseudonym ? Yes—it hides the identity of Dr. M. Lubran, to whom our best thanks.

In this issue, to keep your brains busy we are introducing a Competition. Many of you will, no doubt, have seen the column called " This England " in the *New Statesman.* In this column extracts from books, the press, speeches, and so on are published which are self-contradictory, possess a double meaning, throw a mildly satirical light on their authors, or are intrinsically amusing. It has occurred to us that we might have a similar column (though perhaps only vaguely similar) of quotations from medical books, literature or addresses. The quotations should be short or shortish and should be amusing in themselves. They may have any of the qualities mentioned

above or others not mentioned, provided that they are amusing. They may be witty, humorous, farcical—what you will. They may be taken from any literature whatever, provided they have a medical bearing. We propose to call this series of quotations, *This Medicine*, and we offer a prize of *five shillings* for what is in our opinion the best quotation received each fortnight. Quotations should be sent on the back of a postcard with full details of the source from which they are taken and the sender's name and address. Postcards should be headed " Competition." They should arrive in the *Gazette* Office on the Monday morning before publication, *i.e.*, the first series should arrive by the morning of January 22nd next.

To give a rough idea of what sort of quotations we have in mind for *This Medicine* (though what *This Medicine* turns into will depend entirely on the response of our readers, which we hope will be considerable), we quote some extracts below :—

" Epistaxis.—Put patient in semi-reclining posture with arms above head ; cold applications to forehead and nose, and pinch nose with fingers. Take blood pressure, and, if high, do not control bleeding. Plug anterior nares with gauze soaked in hydrogen peroxide, and later, possibly cauterise. Inject calcium, coagulen, hæmostyl, foreign blood, etc. If still bleeds do posterior plugging, *i.e.*, pass gum-elastic catheter along nose, recover it from pharynx ; tie on plug and withdraw. Fix to forehead with adhesive and proceed to pack anterior nares. In interval, look for adenoids, scurvy, worms."—(From the *Practitioner's Pocket Book*, by D. S. Davies.)

" Dr. V. B. Wigglesworth discussed the psychology of the louse. Lice were said to leave a patient with fever. Why was this ? "—(*B.M.J.*, December, 1939.)

A NOTICE of the reopening of Nuffield House to private patients appears later in this issue.

Varicose Veins

A Clinical Lecture by N. L. Eckhoff, Esq., M.S., F.R.C.S.

GENTLEMEN,—It is sometimes chastening to reflect for a moment on the history of a condition like Varicose Veins. In 100 B.C. Celsus suggested ligation of the saphenous vein, as also did Paulus Æginata in the 6th Century A.D. From that time onwards various people, including Paré and Everard Home, and in the last century Langenbeck, Trendelenburg and Moore, have described operations of different kinds, while in 1916 Horgan stressed the importance of high ligation with excision of the varices. But it is largely to Douthwaite, who first brought to this country the injection treatment of varicose veins in 1926, that we owe the present improved treatment of this condition. Following upon this, most of the hospitals in London started clinics for varicose veins, and we had one at Guy's which was run by Dr. Spurrell when he was a surgical registrar. Dickson Wright, in running such a clinic at St. Mary's later popularised the use of adhesive elastic compression bandages, and so brought to the fore the work of Unna and others going back some 250 years.

There is nothing new under the sun, but to-day we try, as far as possible, to combine the benefits of these various forms of treatment in dealing with the problem.

CLINICAL PICTURE

You are all conversant with the clinical picture of varicose veins. One first sees over-distension of the superficial veins and later insufficiency of their valves, leading to venous hypertrophy, elongation and tortuosity. These changes are due to a weakness of the middle coat of the veins, which may or may not be congenital in origin. There is later a protective laying down of fibrous tissue which produces loss of elasticity. As a result of these changes stagnation of blood occurs with a tendency to thrombosis and ulceration of the surface. Varicose veins are sometimes first produced by prolonged standing, especially if this is associated with heavy labour ; by walking ; by pregnancy, and by abdominal tumours ; nor must one forget the veins which enlarge in order to provide a collateral circulation in those patients who have suffered thrombosis of the deep veins in typhoid fever, pneumonia, influenza, pregnancy or after operations. The whole of the great saphenous vein and its tributaries are commonly affected, while the short saphenous vein may be involved in addition or independently. In the latter case a small bunch of veins is found in the calf, while in the former tortuous channels are seen in the leg below the knee and a large dilated trunk found in

the thigh. It is usually possible to get fluctuation between the thigh veins and the leg veins, and an impulse on coughing is to be expected in the thigh. In some cases the upper end of the saphenous is dilated to form what is known as a saphena varix, while dilatations at other points may exist, indicating the position of veins communicating with the deep venous system.

SYMPTOMS

Hyperæmia of the lower limb is followed by œdema with considerable discomfort and sometimes pain. Later there are capillary hæmorrhages leading to pigmentation of the lower part of the leg. *Hæmorrhage* may occur when a vein which is near the surface bursts through the skin and the loss of blood is alarming. The treatment, as you know, is to tie a pad over the bleeding point, or if a pad is not available a coin can be used. *Ulceration* is a very common complication, and this always occurs in the lower half of the leg, usually on the medial side, but sometimes on the lateral side in the neighbourhood of the malleolus. *Fibrosis* of a very marked degree may develop in this same area either with or without ulceration. In some instances fibrosis is seen without very obvious varicosities, but it is probable that all these cases are due to some impairment of venous return. *Eczema* is also liable to occur, especially in patients who have ulceration, and in these cases osteitis of the underlying bone and malignant changes in the ulcer are also to be expected.

Attacks of *phlebitis* and *peri-phlebitis* are always likely to occur in patients with varicose veins. It is important, however, to remember that in spontaneous phlebitis recanalisation of the thrombus nearly always takes place, and the pathological process usually destroys such valves as may be present so that the last condition is worse than the first.

Various tests are used for demonstrating the degree of varicosity present, and the simplest of these is associated with the name of *Trendelenburg*. The leg is elevated, causing the veins to empty, and a finger or light rubber band is placed over the great saphenous vein as high as possible; the patient is then requested to stand, and any immediate filling of the veins is noted; this indicates incompetence of the connecting veins between the deep and superficial system. The finger or tourniquet is released and any further filling is noted; this indicates incompetence of the valves in the superficial veins. This double filling is sometimes called a " double Trendelenburg positive."

Perthes' test is performed in the following way. With a cuff placed round the thigh the patient is instructed to walk to and fro or to flex and extend the knee ten times; dilated veins diminish if the deep veins are patent. The cuff is released and the patient is instructed to walk again; if no appreciable diminution of the veins is seen on walking, some obstruction is present in the deep veins.

In the *Tourniquet* test a rubber band is placed around the limb, at the level of the tibial tubercle, which obstructs all the veins below the upper end of the short saphenous; the leg is then lowered, and if the valves in the deep connections below the tourniquet are incompetent the superficial veins immediately refill.

A more elaborate test has been devised by *Ochsner* and *Mahorner* in which a tourniquet is applied to the thigh at three different levels in turn and the patient is instructed to walk. If the superficial veins empty it indicates that the valves of the connecting veins are competent, and by the application of the tourniquet at the different levels it is possible to determine the exact site of any incompetence.

It is usually simple on inspection to detect the cases in which these tests will be positive, but it is nevertheless convenient to classify patients into three categories :—

Grade I, those in whom the Trendelenburg test is negative.

Grade II, those in whom the Trendelenburg test is positive.

Grade III, those in whom there is in addition evidence of incompetence of the deep connections.

TREATMENT

The treatment of any individual case depends upon the extent and grade of the disease, any history of past phlebitis, the evidence of ulceration or œdema, and the presence of associated conditions such as pregnancy, obesity, albuminuria, diabetes, etc. It is better to discuss the different methods of treatment in turn and attempt to indicate their application.

Rest is always beneficial to a patient with varicose veins, and to those who have ulceration it can confidently be stated that the ulcer will heal with no other treatment than rest in bed over a long period, but that it will as certainly recur when the erect posture is re-assumed. *Bandaging* with a crepe bandage or other similar bandage will likewise relieve the milder cases, but it will never produce any permanent or satisfactory cure.

Injection treatment has proved a tremendous advance in dealing with all degrees of varicosity. It is interesting to note that injections were tried as long ago as 1853, but the present wave of injection therapy started in America and in France and was brought to this country, as previously

mentioned, in 1926. Various solutions have been used, including biniodide of mercury, quinine and urea, sodium salicylate, sodium carbonate, sodium citrate, sodium chloride, glycerine, glucose, phenol in various strengths, lithocain and sodium morrhuate. The solution recommended by Douthwaite was quinine and urethane. Some of these substances produce intense pain on injection and reactions of various sorts afterwards, and at present the chief stand-by is sodium morrhuate, while in resistant cases quinine and urethane or lithocain may be used. Apart from these local and general reactions, death from pulmonary embolism has occasionally followed injection therapy, but the risk of this appears to be very slight. Pulmonary embolism is not common after spontaneous phlebitis in varicose veins, even though the clot is soft and loosely adherent. This is probably due to the very slow venous circulation, sometimes reversed, which is present in these patients. In chemically-induced thrombosis, it is believed that the clot is much more firmly adherent to the intima of the vein, and is therefore even less likely to break loose and produce this unfortunate complication.

Sodium morrhuate is the most commonly used solution because it is the least likely to produce local reaction if a small quantity escapes around the vein. It is, however, not entirely free from unpleasant anaphylactic complications, and may occasionally produce intense cramp-like pain in the abdomen. Quinine and urethane may produce symptoms of cinchonism and it is always wise to make enquiries as to sensitivity to quinine and to use a very small dose (about 1 c.c.) at the first injection; but this solution and lithocain are both liable to produce severe local sloughing with the production of an injection ulcer, and this is a complication which the patient is not ready to understand or excuse.

Various techniques have been used for injection, and while it is always wise to have the vein sufficiently distended to make injection easy, it is also important that the vein should be emptied immediately after the injection. In some clinics the patient is made to stand during the injection, but this is liable to produce wobbling and even fainting on the part of the patient, while the physician has to assume very uncomfortable attitudes. In other clinics the patient is kept sitting on a couch, and immediately after the injection the leg is elevated above the horizontal. The safest method of all is to have the patient lying down, the veins being distended by a sphygmomanometer round the thigh, the valve of which is released as soon as the syringe needle has entered the vein. Injections may be performed from below upwards, but it is probably better to begin at the top of the venous tree as injections are more easily performed here and the resulting thrombosis may be very gratifying and surprisingly complete and widespread. In resistant cases " twin injections " of quinine and urethane (2 c.cs.) and lithocaine (5 c.cs.), introduced by two operators each with a needle in a different part of the vein, usually produce a good thrombosis.

Although injections have produced good results in large numbers of patients, further follow-up has now revealed that recurrences are extremely frequent and may reach the high figure of 90 per cent. It is for this reason that the pendulum has swung once more towards surgery, which, in the early part of this century, was the method of choice. The operations which were in vogue when I was a dresser were ligation, excision of dilated veins, and stripping of long segments of vein by special forms of stripper. These operations required multiple incisions in the limb, and recurrences were not infrequent.

To-day some combination of surgery and injection therapy is considered to be desirable. In those patients in whom a totally incompetent great saphenous vein is revealed, ligation of the saphenous at the highest possible point should be carried out. It is important that the saphenous vein should be divided as close as possible to its junction with the femoral and that the tributaries which enter it at this point should also be ligatured and divided, for we have seen many instances of recurrence following ligature in an intermediate position. In some instances retrograde injection is practised at the time of the ligature, but the resulting thrombosis may be quite severe and produce a constitutional reaction with fever and intense pain in the leg, which is not well received by the patient. Ligature alone may produce quite a marked thrombosis in the shut-off segment of the vein, especially if the patient remains in bed. For these reasons it is probably better to perform ligature alone, to allow the patient to move about freely with the leg bandaged after the operation in order to reduce the amount of spontaneous thrombosis which may occur, and to consider injection within the weeks that follow. The sapheno-femoral junction is situated about $2\frac{1}{2}$ cms. laterally and $1\frac{1}{2}$ cms. below the pubic spine, a situation considerably higher than is often thought. Local anæsthesia is used and a horizontal incision about $1\frac{1}{2}$ ins. long is made at this site.

Grade III cases are those with incompetent connecting veins, and these present a difficulty because they are not necessarily cured by this simple operation. It is probable that in some of

them further operation for ligature of these connections should be carried out. American authors have described very complicated operations to this end.

VARICOSE ULCERS

Ulceration occurs in those patients in whom varicosities have been present for a number of years, and Dickson Wright has shown that ulceration is almost entirely due to the complete stagnation which occurs in the venous system in these chronic cases. Ulceration does not occur in the area covered by the boot, but in females who wear shoes it may extend right down to the ankle. Acting on this assumption, the correct treatment for ulceration is to remove, as far as possible, the effects of stagnant circulation. This can be achieved, as before mentioned, by putting the patient to bed, but it can be achieved at much less cost and much less inconvenience by ambulant methods. If a really firm bandage is applied from the toe to the knee and kept in position indefinitely, the ulcer will heal in a matter of weeks. Elastoplast bandages were the first on the market, and many imitations have followed. In some patients skin rashes are produced by the use of these bandages; when this happens the bandage can be turned inside out, or bandages containing Unna's paste dressing or some modification thereof will usually be found satisfactory. As the ulcer heals and the leg diminishes in size it may be necessary to inject such veins as now become apparent, or even to perform an operation for ligature of the main vein or of its deep connections. It is necessary, even when the ulcer has healed, to explain to the patient that some permanent support must be worn, and that at the first suggestion of a recurrence of ulceration further treatment will be required. During the stages of healing, skin-grafting may be used to hasten epithelialisation. A Thiersch graft applied to the surface, or small fragments of graft embedded in the granulations will usually produce a satisfactory "take." This skin-grafting can also be performed in the Out-Patient Department if thought desirable.

There remain certain difficulties about which authorities differ. The difficulty of dealing with *incompetent deep connections* has already been mentioned. It would hardly seem wise to subject a patient with severe varicosities to an extensive operation for the discovery and treatment of all these connections, but at the same time in a certain percentage of patients recurrences will continue to appear unless they are dealt with in some suitable manner.

Patients with *intense fibrosis* in the lower part of the leg which eventually produces a tight band of constriction round the limb present a grave problem. These cases are often associated with ulceration, and at the same time the foot below is markedly swollen and cyanotic. It is probable that the only help for these patients is a permanent support.

Diffuse *telangiectases*, with or without varicose veins, present another problem. These are small blue venules which appear all over the limb, very often in adipose women, and for these no treatment is indicated; the veins are too small and too near the surface to justify injection.

Patients who have at one time or another suffered *thrombosis of the deep veins* present a further problem. There may be considerable dilatation of the superficial veins, and it is difficult to decide how much of this represents a collateral circulation. It is probable, however, that the deep veins become recanalised after a year or two, with destruction of their valves so that the dilated superficial veins must be regarded as a further embarrassment, and it has been my custom to treat these late cases as if deep thrombosis had never occurred.

The last group are those patients who present themselves with *spontaneous thromboses*. These are apparently non-bacterial in origin and, like the deep thromboses, eventually resolve with recanalisation and destruction of valves. The best treatment for these patients is to apply a tight compression bandage over a sorbo rubber sponge at the top, to allay any fears of ascending thrombosis, to keep them ambulant, and to inject any other veins that may be present without delay.

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The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

These Night Rounds

The H.P.—" Good evening, Sister ! " " It is good morning, really, you know," said Sister, glancing up at the clock. " Yes, perhaps you are right," I said, feeling sorry I had lost my beauty sleep once again. " I never seem to come in at a reasonable hour. Well, how are they all ? " " About the same, you know. Mrs. 13 is rather weaker, but I think Mrs. 8 has been brighter to-day." " Yes," I said thoughtfully, " it is a pity we cannot do more for them. By the way, No. 18 is a perfect case of Hodgkin ; she is for the Combined Round to-morrow." " What will you have to drink to-night, Mr. —— ? " said a voice over my shoulder. " Let me try that Barlova again, but not so strong that it goes lumpy, and not too hot because it doesn't suit the ulcer." " I'll do my best," said the voice, retiring, a little hurt, into the kitchen. " I had better write up No. 4 for some linctus, Sister." " Yes, here are the bed-letters. . . . This is strange ; her's seems to be missing. Nurse, try and find No. 4's bed-letter for me." " Well, I'd better get on with these discharge notes ; these doctors will want to know something about our investigations." " Yes, I'll find you a Doctor's letter," said Sister, hunting in the paper-rack. " Never mind. I'd better leave it till the morning." " No, here is one after all." After three-quarters of an hour I am able to make my escape through the quiet, sleeping ward. Yes, the Barlova *was* too hot, and my cardiac sphincter was still in spasm as I reached the door.

The H.S.—" Good evening, Nurse ! Your ward sounds cheerful to-night." " Yes, old 2 is a bit lively after coming round." " Never mind, I like them better thus." All around were sounds of activity, the splash of the filter pumps, the occasional groan and snore, the gurgle of the steriliser. " You will want a few Morphias." " Yes, here are the bed-letters," said Nurse, having them all ready, " and here are to-day's operation returns. Have a chocolate ? " " Many thanks, and how do you come by these ? " " A present from a grateful patient." " Why, we must have been making people better." " Yes, Mr. 5 was very pleased to be out after only three weeks." " Good—and there is nothing else to-night ? " " I don't think so." " Good-night."

Sector News

Guy's Letter

MORE changes. We are becoming quite protean in our adaptability. No sooner do we begin to settle down to our duties or our study when some bombshell descends upon us, sent to us from some official quarter of the E.M.S. and couched in smooth terms. Following the withdrawal of the billeting allowance, most of the students have left the College. Their place is being taken by the Residents, all more or less catarrhal, who are leaving the torpid atmosphere of Nuffield for the cooler but more stimulating air of the College. Bookings are already being made for the rooms and cubicles in Nuffield House, which are shortly to be reopened to paying patients. One floor is to be reserved for the Big Noises, who will continue to enjoy their comfortable beds and spacious bathrooms.

In the wards the Honoraries names have returned on the bed-letters, but so far very few of our part-time staff have appeared to claim their beds in person. " Lambs " are quietly supplanting the Nursing Auxiliaries. The trolleys with air-raid equipment are being relegated to side wards, and we are unobtrusively depriving them of their more useful components day by day. Each week a solemn little group assembles outside the Eye Wards to bid farewell to the bus-load of clinical material which we despatch sadly to the Base Hospitals. Not to be out-done, last week some of the Base Hospitals sent us back in the bus a selection of their own cases, who were fortunately well enough to proceed home after a little " re-suscitation." With all these cold winds, we have not been surprised that a few cases of pneumonia have been admitted. But we are grieved to say that our stock of oxygen tents has been insufficient to meet the demand, and we have had to hire one at great expense.

We were greatly honoured over the week-end by having as a patient none other than Sir Arthur Hurst himself. He was seen to appear at the entrance to the Medical Wards, saying that he had commenced an attack of bronchitis. By the next morning, however, he had made a rapid and unmedicated recovery, and was able to leave for

his home in Oxford. We do trust that his health will continue to improve so that he can visit us again on Tuesday afternoons.

Thus the work at Guy's goes on and patients seem to get better. We are certain also that, whatever the New Year may bring, this work will be carried on unhindered by the doubts and uncertainty which may assail us.

H. F. L.

The Starlings' Revue

REVUE No. 14, presented on the 6th January, was a recapitulation of the most popular acts and features of previous shows. Pride of place must go to Brenda Perry and Hedley Atkins, who repeated their scene in a French estaminet. How life-like an innkeeper is Dr. Rink on these occasions! The Coffey brothers gave us the usual Irish jigs and sang another of their original topical ditties pillorying the E.M.S. John Gordon performed his well-known conjuring tricks and also contributed two sketches, one of which showed the disastrous consequences of a plumber and a doctor exchanging professions. Miss Evans sang three songs, accompanied by Dr. Rink. This lady certainly spares no effort to entertain us. Throbbing guitars heralded the appearance of the Bockner brothers, whose music always has its devotees.

Hélène, with the kind co-operation of Dr. Bishop (expressly solicited), sang "Darling, je vous aime beaucoup," and other French songs, whilst Mr. Crisp (also by special request) was publicly invited to assist Diana Marshall to execute her version of "Boomps-a-daisy." The chorus went through its usual evolutions without mishap, but was not much in evidence. The performers and the producer worked hard, but this was unfortunately not sufficient to prevent us being a little disappointed. Old acts were redressed, and too often the garments were threadbare. We look forward to the pantomime as a more fitting swan-song for our war-time entertainments.

A. G. C. C.

Pembury Letter

CHRISTMAS is amongst other things the time of family reunion, when "Dear Octopus" draws in his tentacles. This was very obvious in Pembury, for, with the advent of Yuletide, the entire student population disappeared overnight. The hospital managed to survive this denudation, and with the aid of decorations and an improvement (not difficult to attain) in the hospital dietary, it might be said that a good time was had by all. In addition, the Pembury nursing staff gave us a magnificent dance on New Year's Day, and this is to be followed by a similar gala for Guy's nurses. It was hoped to hold a combined dance, but the available accommodation did not allow this.

Since our last letter Dr. Marston has left us, and we were very sorry to see him go. Neville, too, has been recalled to Guy's, and we wish him well in his new environment. We understand that there are to be considerable changes in the distribution of students throughout the sector, but we have no definite information as to how this will affect Pembury. We believe we shall have a smaller number than before.

The nursing staff has recently been reorganised and wards are now entirely staffed by Guy's or Pembury nurses in charge of a corresponding Sister. Thus the two somewhat different trainings can be conducted without misunderstanding. Whilst some healthy rivalry exists as to the merits of each school, we suggest that each can learn something from the other! Another factor affecting the nurses recently has been the "Streptolytic Hæmococcus," and we had the honour of attending the victims for a few days. Our comment is that Sisters make the worst patients. They won't stay in bed, and demand to return to work. *Ave "Dagenan."*

N. M. J.

Dartford Letter

"JOYOUS GREEN"

"CAN you hear me, Matron?" inquired Jerry Crone, compère of the Joyce Green Revue. Apparently she could, and much else beside. Moreover she heard, it seems, in company with many others, to use a phrase recently made famous, "not without relish."

In describing this revue it should be pointed out that a week before the first performance an important section of the cast was abruptly snatched away to its parent hospitals, the prospect of obtaining a stage had become remote, and the whole enterprise was trembling on the brink of abandonment. Fortunately, however, for this no apology is required. It was generally agreed that the show was a great success. That it was so stands simply and entirely to the credit of John Forbes, its producer and leading performer.

Several other people did well, but none other was indispensable. The standard of the remainder was, in fact, remarkably level, and this again was very largely due to Forbes, who adapted the pattern of his revue to the shape most suited to

the material available. For such a production it was essential that adequate music should be provided, and he was fortunate in having at his disposal F. Ingham, who was excellent with his concertina, an ideally robust instrument for such an occasion, almost rivalling Mr. Macpherson's theatre organ in substance and versatility, a very efficient pianist, and, in Miss Egan, a singer of remarkably fruity quality who, for all that she was occasionally inclined to force her voice, made a very important contribution to the pace and rythm of the entertainment.

Two others who did well were A. G. Johnson and Jerry Crone. With them rather was it a question of whether they could recapture unemasculate in the glare of the footlights a technique already established as a riot in saloon-bars and coastal resorts throughout the United Kingdom and foreign parts within seven days sail of Burnham. In this they succeeded very happily. Their diction and timing were impeccable, for theirs had been a hard school in which the crash of mugs and squeal of barmaids are interruptions more difficult to combat than the rustle of a well-trained audience. Their improvisation, too, was apt, and their material skilfully tempered to outrage a minority of exactly suitable dimensions while ensuring the utmost appreciation of an ecstatic remainder.

Two other nurses sang. " Deep Purple " and " Wishing " were rendered with rather more sweetness than aplomb, while Miss Adams did very well indeed with " One day when we were young," sensibly jettisoning the wistful in favour of the audible.

The performance began with a sufficient volume of sound to command attention from the outset. Very soon Johnson had launched into the first of his highly successful depredations from the Palladium.

After a short sketch on the mixed possibilities of surgery and plumbing, well played by Forbes and Johnson, there followed " Mars Barred," a political satire written by Miss Kirwin, a nurse; this was quite a neatly-fashioned piece both in phrase and construction.

And then came by far the best performance of the evening, four impressions by Forbes, of which the most effective, perhaps, despite its familiarity, was that of the Goalkeeper. This was extremely well done, from the first moments of tensed anticipation until the final scoop and lurch away as the goalkeeper, sulky in defeat, picks the ball out of the net, full of thoughts of appeals to referee, linesmen, or anyone ready to listen to him.

A feature of the remainder of the programme was Crone's compèring, one foot feeling reflexly for the footlight boarding, confident with all the *eclat* of one who feels himself in a native environment, while the final number ended very satisfactorily with great throbbing goblets of sound pulsing from the rhythmic Miss Egan.

Undoubtedly the show was a success. The whole programme satisfied the only sensible criticism—that of being much enjoyed by many beside those taking part. It was not a single-handed effort in that a number of individuals contributed towards the whole. But the entire conception, shaping, moulding and management of the production was the work of one man, and that man the producer.

I. S.

Farnborough Letter

THE unwonted use of the lower extremities in search of unsuitable gifts, together with a surfeit of good things, resulted in a lethargy so extreme that the last Farnborough letter was aborted almost before conception. We told ourselves that there would be plenty to talk about after Christmas; certainly there was no lack of material things. We have enjoyed no less than three excellent Christmas dinners, firstly with the maids and then with relays of the hospital staff. Two dances and a roaring trade at the local hostelry made life complete. The weather, as usual, has been thoroughly Christmassy—in other words, a mixture of melting ice, rain, and an all-pervading damp chilliness. Nevertheless we have oft-times made the arduous pilgrimage to Downe House, where Squire Colbeck holds court. The *ensemble* is reminiscent of the eighteenth century. The table groans with well-cooked meats, and the sideboard adds its harmonies of good cheer. Fowling-pieces, a Holbein or two, and what, with a little imagination, might be termed a musicians' gallery finish the picture.

The students have now returned from a life of ease and leisure to discover that they have been reinstated as amateurs. From January 1st onwards no billeting money is being paid; however, they are still expected to act as hospital porters when the Infernal Convoys arrive. We expect them shortly to follow the example of the Senior Staff and accept only part-time work. For out of all our worshipful band of full-time experts we have now only Messrs. Davies-Colley, Mutch, Stamm and Lindsey-Locke left to hold the fort. We still, however, see the others on teaching rounds. Mr. Cann may find enough time for shooting; we hope that sparrow-pie will become

an established delicacy at our table. The Navy has honoured us with its presence in the shape of Messrs. Price and MacLean. Even Mr. Stafford Clark, of the Air Force, has descended low enough for us to see him.

And finally a grouse. We poor relations in the country have little chance of knowing much about the great world outside. So would it not be possible for the Wills Library to send out current periodicals on loan, returnable at 24 hours' notice?

W. W. G.

Orpington Letter

THERE is little to write of Orpington this fortnight. After the gaiety and frosts of Christmas-time and the dances of the end of the old year, as well as certain celebrations of the advent of the New Year, we have settled into a calm and sober existence. In fact, there are only three things that are worthy of mention. The first is a sad lament—that we still have not received the review (commissioned and, it is believed, written) of our Christmas pantomime, "Dick Orpington." The second is the story of our X-ray plant, half of which has been denied to us for the last two months. This is apparently a very complicated story. We are credibly informed that many experts have dictated to many secretaries many thousands of words on our X-ray plant, so that it cannot be as simple as it seems to us. Some two months ago a group of extremely important and, no doubt, very highly paid officials visited our X-ray apparatus and pronounced it excellent. The next day by letter we were informed that it was unsafe to use. In fact, it was not safe, and had on occasions emitted two-feet sparks with cracks like pistol-shots, and electrified, almost to the point of luminescence, our radiographers. But, nevertheless, to make it safe is a very simple matter. A few yards of rubber insulation and a few hours' work by a competent electrician would ensure that the high-voltage current passed only to the cathode tube. If the firm in charge of our X-ray plant were given permission, this work could be finished in a couple of days. But where is this permission? Presumably it is lost on the correspondence files of the Kent County Council. And so, for any radiography that cannot be performed by a portable set, we have to send our patients to Farnborough. Those too ill to travel must go un-X-rayed.

Lastly, there is the saga of Dr. Bowen Jones and his rides through the night. Called very early one morning (about 3 a.m.) to see one of his patients who complained of pain in the belly, he decided she had an acute abdomen. He rang up the surgeon living in his hotel and could get no answer. He paced round the hospital to find our despatch rider, but she had vanished. He consulted this one and that one as to how he should inform the surgeon, and eventually borrowed a bicycle and rode a mile and a half through the night to rouse the surgeon personally. Together they decided that the patient had an acute abdomen and required an operation. But there was no theatre staff and no anæsthetist. The theatre staff was roused, but the theatre had to be prepared. The anæsthetist for the day was 'phoned, but slept on undisturbed. As dawn was creeping over the eastern sky, Dr. Bowen Jones quested out once more on his bicycle, rode another mile and a half through the night, roused and brought back his anæsthetist. In triumph the operation was begun at 10 a.m., only made possible by the invention of the bicycle and Dr. Bowen Jones' resource.

E. B. R.

Nursing News

A LECTURE BY DR. ELLIS

THE Social Committee, composed of members of the Nursing Staffs of Guy's and Pembury Hospitals and also students, has been organising fortnightly dances, periodical concerts and generally trying to provide entertainment for nurses and students. The concerts have been of a remarkably high standard. (Please note, Orpington, Farnborough and Joyce Green!) All local talent, of course! Some of the topical songs were written, as well as sung, by students. Judging by attendances, the concerts are very popular.

The most recent item (up to the time of writing) was in a more serious vein. On Friday, the 15th of December, Dr. Ellis gave a very interesting lecture on the condition of the Polish refugees in Roumania. He went to Roumania after the German invasion of Poland, and saw actual conditions for himself. It will be remembered that a year or two ago he went to Spain to study the refugee problem there. Before the war, Roumania had made preparations to cope with an influx of refugees from Poland. The circumstances were, as it turned out, entirely different from what had been anticipated. It had been thought that the refugees would cross the frontier in small numbers at a time, in which case it would have been comparatively easy to deal with them. But this did

not happen ; the vast majority crossed in a period of two days. Consequently all plans for an orderly reception failed—it was not even possible to institute any proper form of registration. This resulted in great disorganisation. It was very difficult to set in motion an efficient system for accommodation of the additional population, and besides civilians there were large numbers of soldiers who had to be looked after. The latter were, for the most part, sent to the south-eastern part of the country away from the war zone—a district, incidentally, where malaria is prevalent.

In the rush to leave Poland much mixing of the civilian and military groups occurred, so that civilians found their way into military camps and soldiers into civilian camps. These muddles were slowly being cleared up as a semblance of order became re-established. Many refugees came into Roumania with neither food nor blankets. The provision of blankets was the more urgent problem because Roumania, which is for the most part an agricultural country, was able to produce enough food. The hardships which they were compelled to undergo on this account were very great indeed, as the cold becomes intense in late September and October.

In the early weeks there was no medical assistance available, and few of the amenities of life. There were no baths, no Polish books, and no chance of work. In fact, nothing was present to maintain their morale. Now that the authorities have had time to collect their ideas after the first rush an improvement in the refugees' conditions is to be expected. Already some sort of organisation is appearing.

The tragedy was that no help was available in the first days and weeks. It was during this brief period that the refugees lost all morale and gave up struggling for the betterment of their conditions. The powerful German influence behind the throne was one of the main causes of the apparently half-hearted way that the Government dealt with the problem. Another cause, and one which concerns us, was the British Government's generous financial support made expressly to help the Polish refugees. The restrictions imposed on the way it was to be used were such that it could not be of any benefit for several months, and so its value was diminished. Decisive action would have turned failure into success and altered the lives of thousands of disheartened people.

Now the problem is how to re-establish the morale and self-respect of the Poles and fit them into Roumanian life. It is a problem far more urgent and far more difficult than that of the Spanish refugees.

Christmas in the Workhouse

IN 1939, Guy's nurses spent Christmas in the Workhouse—at least those of us at Pembury did.

There were three notable dates—the 25th, 27th, and January 5th. The first, being Christmas Day, we forfeited our off duty and spent it instead giving out beer and cigarettes to the patients—not the troops ! Most of us were disappointed in Christmas from the patients' point of view, for there was nothing doing for them beyond eating and drinking. Some seem to have enjoyed film shows, and the children had a Christmas Tree and Father Christmas, but that was all. However, in the evening we drowned our sorrows at a Fancy Dress Dance, where a Symond's patient from Guy's won the first prize !

On the 27th we had *our* dinner in the Court Room. Sister Hilda, Sister Marian and Sister Opie presided over us, and the Master and Matron served out liberal helpings of Ye Olde Christmas Fare.

January 5th was the date of the official Guy's Dance, which seems to have been attended by everybody, including the Queen Victoria Rifles. Sister Hilda welcomed nurses and their partners in her room upstairs, and everybody enjoyed themselves immensely.

A. G. D.
J. S.

Review

Tuberculosis of the Upper Respiratory Tracts. By F. C. ORMEROD, M.D., F.R.C.S. Published by John Bale. Pp. 215. *Price* 21*s*.

THERE are some 76,000 cases of laryngeal tuberculosis in this country. Most of these are in sanatoria or special hospitals and rarely come under the care of laryngologists in general hospitals. Sixteen years as laryngologist at the Brompton Chest Hospital have given the author a wealth of experience which enables him to write with authority.

The greater part of the book is devoted to lesions in the larynx. The statistics of the Brompton Chest Hospital are analysed and the

incidence and prognosis of laryngeal lesions in various groups of phthisical patients are discussed. The minute detail in which the pathological changes in each part of the larynx are described pays tribute to the author's keen observation. He disagrees with the majority of writers on the order of frequency in which various parts of the larynx are involved. He finds that lesions occur most frequently on the vocal cords and not in the inter-arytenoid region. The importance of adequate treatment of the pulmonary lesion is stressed, a laryngeal lesion being no contra-indication to such measures as thoracoplasty. Local treatment is fully discussed. The application of the galvano-cautery is found most satisfactory in the author's hands, and the indications, contra-indications and technique of this form of treatment are clearly stated. Reference to lupus and lupoid tuberculosis completes this section of the book.

The section on the pharynx and its associated structures is comprehensive. It includes the œsophagus, tongue, salivary glands, tonsil and mouth, and should have a wide appeal. The section on the nose is chiefly devoted to lupus of the nose, which is discussed in some detail. Some reference is made to tuberculous infection of the accessory nasal sinuses. The section on the ear is complete. The mode of infection is discussed and distinction is made between primary and secondary lesions. Primary lesions occur in infants who are fed on milk with a gross tuberculous infection. The diminution in the incidence of this lesion is attributed to the improvement in the milk supply. In these cases a cortical mastoid followed, if necessary, by a radical operation is the line of treatment recommended. In secondary cases the treatment is largely determined by the pulmonary condition, but a radical operation may be necessary.

Throughout the book copious reference is made to the literature and a bibliography is appended. The coloured plates have been beautifully executed, and there are many illustrations besides. The book is written for laryngologists and those in charge of phthisical patients. It fulfils its task admirably and is well worth reading.

A. B.-D.

Correspondence

Second Thoughts on Returning to Guy's

To the Editor of the GAZETTE

Dear Mr. Editor,—

"Peccavi."

Yours, etc.,

T. B. LAYTON.

Guy's Hospital,
S.E.1.

Appointment of House-Officers

To the Editor of the GAZETTE

SIR,—I should like to bring to the notice of Guy's men, in all sectors, the peculiarly scandalous manner in which new appointments of houses-officers is being made.

Since the beginning of the war it has been made clear that students, after qualifying, will have to do at least six months' house appointments before being eligible for the Services. The appointment of house officer to Guy's or to one of the hospitals in the sector has therefore become one of the preliminary essentials to newly-qualified men. Up till now this has been recognised by those controlling the administration of appointments.

It has now become evident that these appointments are to be filled (and, in certain cases, have been filled) by qualified men of more mature experience, some of whom have done their house jobs at Guy's some five years previously.

Those men who have already done at least six months' house jobs are eligible for the Services, and, although there is a waiting list of some length, this is no reason why those who are waiting should fill the posts of those younger men who have yet to gain their hospital experience.

Apart from the absolute necessity of the newly-qualified man doing his six-months' appointments, there is another side to the question.

The aim of the majority of Guy's students throughout their training has been and still is to finish by being appointed to a house job at

Guy's. This aspiration still continues, in spite of the present enforced changes.

In fact, it has become so much stronger and now includes the base hospitals as well as the Mother institution.

This is not so much an individual aspiration as a Guy's tradition.

Are such aspirations and traditions to be cast away so lightly?

Yours, etc.,

"SCANDALISED AND NEARLY-QUALIFIED."

Guy's Hospital,
S.E.1.

Time Table for New Patients in Out-Patients Dept.

TIME-TABLE OF ATTENDANCE OF NEW PATIENTS IN THE OUT-PATIENT DEPT.

Monday	9.0 a.m.	Ear, Nose and Throat	Mr. Layton.
	9.30 a.m.	Ante-Natal	Mr. Hamilton.
		Gynæcological	Mr. Cook.
		Skins	Dr. Barber.
		Fractures	Mr. Lambrinudi.
	10.0 a.m.	Medical	Dr. Boland.
		Surgical	Mr. Atkins.
	5.30 p.m.	T.B.	Dr. Boland.
Tuesday	9.30 a.m.	Genito-Urinary	Mr. Doherty.
		Vaccine	Dr. Knott.
		Eyes	Mr. Morgan.
		Neurological	Dr. McArdle (for Dr. Symonds).
	10.0 a.m.	Medical	Dr. Darke (for Dr. Campbell).
		Surgical	Mr. Brock.
		Psychiatric	Dr. Brown (for Dr. Gillespie).
Wednesday	9.30 a.m.	Ante-Natal	Mr. McNair.
		Skins	Dr. Forman.
	10.0 a.m.	Medical	Dr. Grant.
		Surgical	Mr. Massie.
		Children	Dr. Ellis.
Thursday	9.30 a.m.	Ear, Nose and Throat	Mr. Cann.
		Skins	Dr. Forman.
	10.0 a.m.	Medical	Dr. Leeming (for Dr. Hampson).
		Surgical	Mr. Eckhoff.
	1.0 p.m.	Eyes	Mr. Law.
		T.B.	Dr. Boland.
Friday	9.30 a.m.	Ante-Natal	Mr. Cook.
		Gynæcological	Mr. McNair.
		Genito-Urinary	Mr. Doherty.
		Neurological	Dr. McArdle.
	10.0 a.m.	Medical	Dr. Douthwaite.
		Surgical	Mr. Atkins.
	10.30 a.m.	Orthopædic	Mr. Lambrinudi; Mr. Stamm.
Saturday	10.0 a.m.	Medical	Dr. Lintott.
		Surgical	Mr. Brock.

Dental.—Daily at 10 a.m.

Hospital Information, etc.

Notice

GUY'S HOSPITAL MEDICAL SCHOOL

A Course of Instruction in preparation for the Final Examination for the Fellowship of the Royal College of Surgeons of England will commence on Monday, 19th February, 1940.

T. J. EVANS,
Dean.

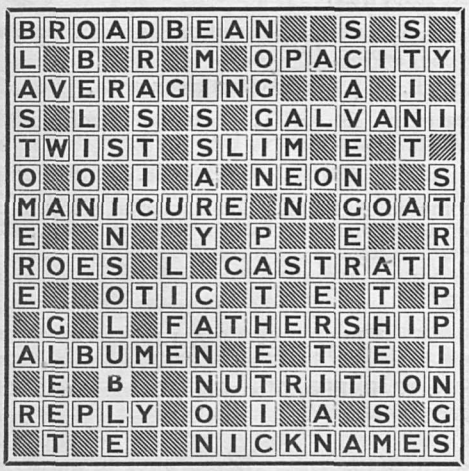
Notice

NUFFIELD HOUSE FOR PAYING PATIENTS

Nuffield House will reopen for the admission of patients on Monday next, January 15th, 1940. Inquiries regarding admission should be addressed to the Sister in Charge, Nuffield House, Guy's Hospital (Tel., Hop 1864), or to any member of the Medical or Surgical Staff of the Hospital.

Crossword No. 10

SOLUTION



NOTES

Across

9. Ave-raging.
16. Man—I—cure.
25. Oh, tea I see.
28. Fathers-hip.
31. Re-p-ly.

Down

1. Blast-O.M.-ere.
2. O.B.E.-lion.
3. Dr-as-tic.
7. S-tint.
17. Anagram.
24. A-the-is-m.
26. C-ann-on.

Pass List

UNIVERSITY OF CAMBRIDGE.
FINAL M.B. EXAMINATION
Michaelmas Term, 1939.

PART II.

Principles and Practice of Physic, Pathology and Pharmacology.

P. J. R. Davis
H. P. Dick
I. S. Eve
A. C. C. Hughes
R. Rowlandson

FIRST M.B. EXAMINATION.
December, 1939.

PART IV.

Organic Chemistry.
R. A. Green.
Pharmacology.
D. W. Burnford.

UNIVERSITY OF LONDON.
SECOND EXAMINATION IN DENTAL SURGERY.

PART I.

December, 1939.

Pass.

A. E. Cadman
T. J. Hancock
J. Rankin
N. Stark

The following Students are credited with Anatomy and Physiology.

D. J. Anderson
G. A. Brown
G. E. Johns
J. H. H. Knight
P. H. S. Lahaise
H. C. Miller
D. H. Norman
P. W. Pett
M. C. Rosen

PART II.

Pass.

*H. A. Buck
R. C. D. Morrell
N. M. Midgley
D. Wright

*Awarded a Mark of Distinction.

THIRD (B.D.S.) EXAMINATION IN DENTAL SURGERY.

December, 1939.

Honours.

(*a*) (*b*) W. G. Cross.

a Awarded a Mark of Distinction in Dental Surgery (including Special Pathology).

b Awarded a Mark of Distinction in Operative Dental Surgery.

Pass.

W. J. Head
K. R. Titford

SUPPLEMENTARY PASS LIST.

The following Student has passed in Group II.

W. S. Jackson.

SOCIETY OF APOTHECARIES OF LONDON.
FINAL EXAMINATION.

December, 1939.

Surgery.

P. S. Clarke
*E. A. Spouse

Medicine.

D. S. Foster.

Forensic Medicine.

D. S. Foster.

* Has completed the examination.

CONJOINT BOARD.
FIRST EXAMINATION.

December, 1939.

Anatomy.

J. D. Everell
D. Gill
R. B. Illing
W. James
G. R. W. Luntz
J. R. P. Murley
E. J. Tucker

Physiology.

D. Gill
R. B. Illing
H. P. Merrick
R. D. Plowman
N. A. Punt
P. M. Thomas
L. P. J. Wright

Pharmacology.

A. G. Beaton
P. R. Green
H. G. King
H. G. Phillips
G. P. A. Sechiari
R. P. Strang
J. G. Stubbs

ROYAL COLLEGE OF SURGEONS.
FINAL F.R.C.S.

S. H. Raza.

UNIVERSITY OF OXFORD.

The following Degree has been conferred.

Bachelor of Medicine.

Eric Smith.

Papers by Guy's Men

Bradlaw, R. V. Oral sepsis in relation to systemic disease. *Dental Record*, 1939, lix, 586.

Todd, T. F. Relief of intractable pain in carcinoma of the cervix uteri. *Lancet*, 1939, ii, 1305.

Rushton, Martin A. Observations on Fish's " Dead Tracts " in dentine (Preliminary report), *Brit. Dent. J.*, 1940, lxviii, 11.

Lloyd, Vernon. Modern chemotherapy and gonococcal infections. *Practitioner*, 1940, cxliv, 44.

Moon, R. O. Affections of the heart in time of war. *Ibid.*, 61.

Erskine, David, and Another. Agranulocytosis complicating treatment of acute pemphigus with M. & B. 693. *Lancet*, 1939, ii, 1366.

Baker, C., and Mann, W. N. Hodgkin's disease. *Lancet*, 1940, i, 23.

Punch, A. Lisle. Disease of the right middle lobe of the lung. *Lancet*, 1940, i, 5.

Berry, E. H. J. Paroxysmal tachycardia. *Ibid.*, 29.

Tregarthan G. G. T. Sectional compound impressions. *Dental Record*, 1940 lx, 1.

Trail R. R., Chronic cough. *Med. Pr.*, 1940, cciii, 8.

Thompson, A. Ralph. Some practical points in connection with enlargement of the prostate. *Ibid.*, 13.

Changes of Address

Dr. R. W. B. Ellis, Monkleigh, Lower Green Road, Pembury, Kent.

Appointments

H. L. Messenger, Examiner in Special Anatomy and Physiology for the B.D.S. at London University.

Marriage

SUZMAN—HAMILTON.—On December 20th, 1939, in London, Samuel S. Suzman, M.R.C.P., to Constance Mary Hamilton.

EDS. { E.B.R. H.F.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LIV — *27th January* 1940 — *Number* 1344

PASSIM

THE E.M.S. is essentially a body to co-ordinate the medical services provided in certain dangerous areas, so that adequate investigation and treatment may be provided for persons ill from peace-time or war-time causes. A fair view of the work of the E.M.S. may be obtained by examining the development and difficulties of hospitals new-grown under its ægis. It has occurred to us that it would be instructive to compare the workings of such a hospital with those of a well tested and proven voluntary hospital such as the peace-time Guy's.

Peace-time Guy's dealt capably with many thousands of in-patients and out-patients a year, and, given a little warning, we are confident could have housed and mended a sudden influx of a hundred air-raid casualties equally capably. What factors were responsible for its standard of medical service? Two important features Guy's possesses which are shared by few other hospitals—a great tradition and students, male and female. But these alone are not responsible for the standard of medicine at Guy's. No, three other features of Guy's seem important to us. The first is the Guy's personnel, male and female. Some are geniuses and some are not, but all provide at the very lowest estimate entirely adequate medical service. The second is the policy and management of Guy's. All departments are managed by men and women of considerable practical experience who deem of importance not only the patient's welfare but the quality of the service they give. Lastly, and perhaps most important of all, Guy's is a great enough institution for many hundreds of people of very differing personalities and social statuses to work together not only smoothly but with goodwill. We may note that there are three factors to which Guy's does not owe its success—its finances, its buildings, and its supplies and equipment, for all of these have been bettered in many a worse institution.

Now compare this with a certain E.M.S. hospital in the Guy's sector. This hospital is staffed by Guy's personnel and run under the control of both the E.M.S. and a local County Committee. Take first the last three factors mentioned. Its finances, though perhaps poorly administrated, should be sufficient. Its buildings are poor and badly designed. The supplies and equipment are not above average, are often painfully inadequate in quality, and the organisation and delivery of them would be tolerated in no place but a bureaucratic institution.

This hospital is staffed by Guy's men and women anxious to bring and spread Guy's traditions of service. These men and women have had wide practical experience and have not been brought up in a school of rash spending, yet they are hindered, delayed and frustrated by hundreds of busy but slow officials. We give instances. It took three months to obtain a supply of walking irons urgently required. It has taken over two and a half months of hard and acrimonious letter-writing, so far without result, to attempt to get a short and simple job of work performed on the X-ray plant to make it fit for the urgent work it is required for. It has taken many months to obtain essential surgical equipment. We could multiply such instances.

In certain cases in our experience the work of the E.M.S. has been far from adequate. We mention two instances. The Government beds are unfitted for ordinary ward use, and yet these

are provided for the new Emergency Hospitals. The designs of the Government hospital huts, particularly the theatre huts, are far from satisfactory. Such designs should not have been passed by men and women of practical experience. We again give instances. In the hut wards no provision has been made for "washing up" or sterilising instruments and equipment. The lamps have been hung directly in front of windows, thus increasing the efficiency of the black-out. To get to the X-ray Department it is necessary to walk through the theatre (in which there may be two or more operations taking place) or go outside the building over the mud.

Lastly, as yet the E.M.S. is not a great enough service for all its members to sink their personal differences and work for the common good. It has not yet a tradition, nor has it pressure of circumstances. And, after all, the Government will pay.

We should take less notice of the failure of the E.M.S. were it not a matter of such vital importance. If air-raids were to occur the lives of many thousands of people would be in its care. If no air-raids occur, it is still responsible for many thousands of people suffering from peace-time ills. War demands an improvement rather than a deterioration in medical services. As our analysis has shown, the defect appears to be in the ruling personnel, and in the spirit between the individual members of the E.M.S. We feel that the only solution is a drastic purge. Men of wide practical experience and organising ability, men of drive, men who realise the national urgency must replace those who are at present controlling our "muddling along." And someone must be in command who will build the disorderly mass of E.M.S. cogs, axles, motors into a machine that works quickly, smoothly, efficiently—or we may lose this war.

YET another batch of those familiar buff envelopes has been spread throughout the Sector. This time the message is not curt, and is not indefinite. This time our Headquarters have reached a decision which comes carefully worded and personally signed. House Officers throughout the Sector are to be paid £160 (approx.) per annum. Those stationed at Guy's should be satisfied with this figure, as they have the advantage of much clinical experience. Those elsewhere in the Sector may be disappointed. Some are billeted under conditions far from ideal, and their work in the chronic wards is often without medical interest. We feel that the latter are justified in expecting some greater compensation for these unwished-for hardships. The future of a House Officer under the New Scheme is still undefined. It appears that after six months there may still be possibilities of further service. But no one knows. We think it likely, therefore, that, unless this uncertainty is clarified, Guy's men will be, and indeed are, leaving Sector 10 to undertake more certain employment in the Services and elsewhere.

WE are pleased to include in this issue a letter from Dr. Ellis concerning the Children's work in Sector 10. The Stork is willing, we understand, to look beyond the chimney-pots out towards the green fields of Kent. We assure Dr. Ellis that the next ambulance to Pembury will bring him several more patients for his Children's Ward.

IT has been decided to proceed with the building of the York Psychiatric Clinic in spite of the war. It is intended to open this clinic to patients when the war is over.

THE *Gazette* wishes to congratulate Dr. E. B. Reeve on his success in the recent Membership Examination and on his appointment at the Brompton Hospital. This Journal and its readers are grateful to him, as Editor, for maintaining its publication through the difficult early months of the war.

Intra-Peritoneal Abscess

A Clinical Lecture given by Lancelot Bromley, Esq., M.Chir., F.R.C.S.

GENTLEMEN,—My interest in this subject was first aroused some forty years ago in the days when appendicitis was almost unrecognised and operation seldom performed. A boy sixteen years of age, with whom I was on holiday at the seaside, became ill. The symptoms were abdominal pain, vomiting and pyrexia, and he was confined to bed for a week. At the conclusion of the week he was pronounced to be fit and able to resume his holiday, but, having got up, he collapsed and died the same night. The cause of death was stated to be "perforation of the bowel." This patient had acute appendicitis followed by an appendicular abscess which rup-

tured into the general peritoneal cavity. Quite recently I was called to see a man forty years of age who had been ill for a week with abdominal pain, vomiting, diarrhœa and pyrexia. In the district in which he lived there was an epidemic of gastro-enteritis, and he had been treated for this complaint. This patient was being nursed by his wife, and in her absence he elected to get out of bed to see whether he could stand and walk. He stumbled and fell and was unable to get up because of agonising abdominal pain. He became collapsed, and the physical signs were those of general peritonitis with intense board-like rigidity. An operation performed shortly afterwards revealed a gangrenous appendix lying in an appendicular abscess which had burst and caused diffuse suppurative peritonitis. These two cases were similar. Operative treatment, however, was not considered in the first case, whereas an operation, though deferred, led to recovery in the second case.

In surgical practice the problem of the treatment of an intra-peritoneal abscess is of frequent occurrence. The problem is made more interesting by the nature of the wall of the abscess cavity, its relation to peritoneum and bowel, and the complications which may arise through its spread or rupture. Almost every day the question arises when is the most suitable time to operate on an intra-peritoneal abscess. To decide when is the correct time to operate for appendicitis is difficult enough, unless one is able to visualise accurately the condition of the appendix. To make a decision where an appendicular abscess is present is doubly difficult. On general principles an abscess should be evacuated and drained as soon as it has become adequately localised. This principle holds whether the abscess is a primary condition or follows an operation. In both instances one has to consider the possibility of causing damage to structures as yet unaffected. Untimely or unwise intervention may cause further damage; either on approach to the abscess or by separating adhesions limiting the abscess and so adding to the risk of spreading the infection. One has to compare the risk of such a procedure with the risk of complications which may arise if nothing is done.

Appendicitis is responsible for most cases of intra-peritoneal abscess, but a number are residual abscesses following operation. Residual abscesses occur through lack of absorption or of drainage of inflammatory products. The question of drainage at the end of an abdominal operation should be given careful consideration. In early appendicitis with clear or turbid free fluid in the peritoneal cavity, having removed the appendix, two procedures are available—either to close the abdomen and expose the patient to the risk of a residual abscess, or to insert a drainage tube. In the later case in which, through lack of adequate protective adhesions, there is diffuse suppurative peritonitis, clearly drainage is indicated. (It would appear, however, that there may be a difference of opinion on this point. In a recent textbook there is a statement that the peritoneal cavity should not be drained even in cases of diffuse suppurative peritonitis. In fact, this textbook advises that such an abdomen should be closed.) In practice, there is no doubt that initial drainage is beneficial and lessens the chance of a residual abscess by forming a track for the escape of inflammatory products.

As a rule an appendicular abscess will be in one of two situations—in the right iliac fossa or in the pelvis. This will be determined by the position of the appendix. When the abscess is situated in the right iliac fossa it is limited on the right side and behind by the pelvic wall, on the left side and below by the terminal small intestine and its mesentery, above and in front by the cæcum and omentum. If the abscess is situated in the pelvis it is limited to the right by the cæcum, behind by the rectum, to the left by the sigmoid colon and meso-sigmoid, below by the peritoneal reflection forming Douglas's pouch, above by omentum and coils of small intestine, and in front by the bladder (or uterus). It is important to bear in mind these relationships as they are responsible for the various symptoms, signs and complications caused by spread of the abscess to neighbouring structures.

An abscess in the right iliac fossa may produce very little in the way of symptoms and signs unless a spread of inflammation to the bowel wall causes an irritative diarrhœa. A pelvic abscess may press upon the rectum and cause constipation, or irritate the rectum and cause a mucous diarrhœa. The small intestine, especially the terminal ileum, becomes swollen, and this swelling interferes with the neuro-muscular mechanism and may eventually lead to paralytic ileus. So long as an abscess is present, interference with the neuro-muscular mechanism progresses and may result in complete obstruction with persistent vomiting. Spread of inflammation to the bladder wall causes frequent and painful micturition or retention of urine.

The general signs are those of an ill patient with a moderate degree of pyrexia, a furred tongue and increased pulse rate. Vomiting does not occur until the lower end of the ileum is involved. On abdominal palpation a tender lump is felt. If no such lump is felt, rectal examination reveals an anterior bulging which flattens the

rectum against the concavity of the sacrum, when a pelvic abscess is present. Vaginal examination reveals a filling-up of Douglas's pouch which obliterates the posterior fornix of the vagina.

When an abscess develops there is often an improvement in the general condition of the patient; the temperature which may have been originally 101-102 degrees after thirty-six or forty-eight hours may subside to normal and the patient become relieved of pain unless he is moved.

An abscess may resolve completely and a markedly palpable lump may in the course of time disappear; in which case the patient may make a perfect recovery. But it takes time for the adhesions surrounding an abscess to disappear, and until the adhesions have disappeared there is a possibility of them causing obstruction. An abscess may point under the skin, but more frequently ruptures into the bowel. In such circumstances a retro-cæcal abscess will rupture into the cæcum and a pelvic abscess into the rectum. Recovery takes place.

While the abscess is present and operative treatment is delayed in the hope that there may be resolution or spontaneous evacuation, complications may occur which demand other treatment. The most serious complication is the condition of paralytic ileus. There is increasing abdominal distension accompanied by vomiting, at first intermittent but later continuous and regurgitant. The small intestine becomes over-distended with its own secretions as well as with any fluid the patient may have taken. Auscultation of the abdomen with the stethoscope is most valuable. If peristalsis can be heard at this stage the outlook is hopeful. On the other hand, a silent abdomen is of grave prognostic significance. Obstruction may also be caused by adhesions involving a localised portion of small intestine. Such obstruction develops more rapidly and is associated at its onset with extreme shock.

When an intra-peritoneal abscess is diagnosed operation should be undertaken before the onset of complications. The simplest possible method of draining the abscess without damage to the surrounding structures should be used. If easily accessible the appendix should be removed. Failing this, occasionally it is possible to tie off and invaginate the base of the appendix and to pull out the mucous lining of its distal part.

Certain medical measures have proved useful in the treatment of post-operative ileus. Anti-gas gangrene serum administered at the time of the original operation is helpful. The bowel may be stimulated to activity by hot applications to the abdomen, and by the administration of such drugs as pituitrin, eserine, acetyl-choline and prostigmine followed by treacle or ox-bile enemata. Gastric lavage may be required and the patient's general condition may be maintained by continuous intravenous glucose with saline.

There is a tendency for the performance of ileostomy to be deferred too long. When it is possible to foresee the case in which an extreme degree of ileus will occur, this procedure should be carried out before this condition has become well established. When pre-operative ileus has occurred, when the abscess is dealt with at operation, an ileostomy is also performed.

Persistent post-operative distension in spite of previous evacuation of an abscess may be relieved by the formation of a spontaneous fæcal fistula. The fistula forms as the result of softening of the wall of the cæcum or terminal ileum where these structures form part of the abscess wall. Such cases usually make a good recovery.

Among other conditions liable to form intra-peritoneal abscess are salpingitis, diverticulitis and new growths. Salpingitis is frequently a chronic disease in which long-standing inflammation leads to the formation of adhesions in the pelvis. If leakage or rupture of a tube occurs a chronic pelvic abscess is formed. The ovary is often involved in such an abscess, and it becomes softened and degenerated. This condition is known as a tubo-ovarian abscess. These abscesses may remain concealed or may rupture into the general peritoneal cavity. A portion of the colon, usually the sigmoid loop, involved in diverticulitis is generally enveloped in dense adhesions. Within this mass a diverticular abscess may form and persist as a chronic abscess. On occasions such an abscess may increase rapidly in size and may burst its wall and leak into the general peritoneal cavity. Should perforation of a growth occur, it is apt to form a fistulous communication with an adjacent loop of bowel, and round this fistula an abscess forms, well enclosed by adhesions.

The following is an example of residual infection following appendicitis. A girl fourteen years of age became ill at school with symptoms and signs of acute appendicitis. She was operated on thirty-six hours after the onset of symptoms. The appendix was found to be retro-cæcal, very acutely inflamed and gangrenous at its distal extremity where it had nearly perforated. There was a considerable amount of œdema extending into the cæcal wall and meso-colic structures and acute inflammatory enlargement of lymph glands at the inner border of the ascending colon. The appendix was deeply imbedded in the cæcal wall, and after its removal a deep œdematous trough was exposed. The appendix itself when examined

afterwards was found to contain a quantity of dark brown B. Coli pus under considerable tension and the mucosa throughout was congested and hæmorrhagic; the distal part of the appendix was gangrenous, there was an area of impending perforation, but there was no concretion in the appendix. The abdomen was drained. The patient made uninterrupted progress. At the end of a fortnight drainage had been discontinued and the wound was healed when there was a rise of temperature and pulse rate and a tender swelling became apparent in the right iliac fossa. This swelling formed a retro-colic abscess which was drained through a posterior extra-peritoneal approach. After a long period of drainage of thick and offensive pus the condition gradually subsided and the patient made a good recovery.

This case is an example of a residual abscess due to meso-colic cellulitis and lymph-adenitis. In many cases of acute appendicitis where the temperature fails to settle in spite of appendicectomy and adequate initial drainage this state of cellulitis and adenitis may be the responsible factor, though it is rare for an actual abscess to form. Such a state of post-operative cellulitis and adenitis probably occurs quite frequently, though it is seldom recognised.

These cases of intra-peritoneal abscess which are associated with such varied and dangerous complications are distressing to the patient, relatives and the surgeon, but usually, with patience after a period of anxiety, recovery takes place. In their treatment every care should be taken to anticipate and so prevent complications. Therefore every consideration should be given at the time of the original operation to minimise trauma. Adequate drainage is essential, and the patient should be nursed in the Fowler position, the object of which is to maintain drainage and to encourage inflammatory exudates to gravitate into a relatively harmless position in the pelvis.

This Medicine

I DO not believe that any improvement in the coronary arteries can be produced by operation on the gall-bladder.—(*Guy's Hospital Gazette*, liii, 278, 1939.)

X-ray fractures of R. iliopubic and ischiopubic rami of pelvis. There is some superinferior and lateromedial overlap of the fragments.—(*Extract from report on a patient from Lewisham Hospital.*)

" Yes, I'm very well now, thank-ye, after that doctor in hospital injected me with Insolence. But as luck would 'ave it, I got a pain in me stummick before I left, and so he advised me to put on a Belly-donia plaster."—(*Commentary by an old lady discharged from hospital after insulin treatment.*)

Black area over sacrum and to right. Bruising on buttocks. Rhonci in both chests. Mental condition very strange. . . . Fit for discharge to Orpington.—(*Extract from a Farnborough bed-letter that appeared with a Farnborough patient evacuated to Orpington.*)

(not

He that knows not, and knows not that he knows
is a fool; shun him.
He that knows not, and knows that he knows not
is a child; teach him.
He that knows, and knows not that he knows
is asleep; wake him.
He that knows, and knows that he knows
is wise; follow him.

(*Quotation from the Arabic—*
Whitnall's Study of Anatomy.)

This fortnight's prize of 5*s.* is divided between J. R. Lauder, Guy's Hospital, and J. Bowen Jones, Orpington War Hospital, for sending in the first two entries. We are pleased with our readers' response to This Medicine, and hope that the next fortnight will produce further and even better quotations.

Sector News

Guy's Letter

" YOU are wanted on the National 'Phone, Sir." The Take-in H.P. rose from the table, leaving his rapidly-cooling dinner, and went down to the Lodge. " I think it's a lady, Sir," said the Porter, curiously. " Hello," said the H.P., but no reply. . . . Then a distant voice—alas, a male one: " This is the London Bridge taxi-cab rank. . . ." " Sorry, Sir, I've connected you up wrong," cut in a voice from the Front Lodge; " You're through, Sir." Ah,

that is better; this time it *was* the lady's voice: "Is that Guy's? Well, I wondered if you were still on the Embankment or had been evacuated." "I think we are still here," said the H.P., not a little puzzled and wondering if this were all a dream. "Well, you see, I know someone who has been taken to Guy's and I wondered if I could come and see him." The H.P. in desperation gave her a warm welcome to the Hospital "near London Bridge," and rang off. "I must have made a mistake," said the Front Lodge helpfully, "but I fortunately took the Doctor's number, and I'll try and get her for you." A few more minutes passed and then: "Sorry, Sir, the line seems to be engaged. She must be trying to get through to us." The H.P. smiled as he thought of the paradox of the situation. A quarter of an hour later a harassed G.P. heard that her case could not be taken in as all the Hospital beds were full.

So much for the Hospital telephones.

The clerks had had a busy day. They had just taken the last case back to the ward from the theatre. They were feeling tired but satisfied. "Taking-in" was well worth while. As they passed through the Reading Room the clock gave the time as ten past seven. Good; they had finished early enough for dinner. As they climbed the few steps up to the Dining Room they were aware that all was not well. One of the doors already was covered by a blind which bore the fateful legend "Closed." Through the glass of the other they saw a dark-robed figure which fixed them with a reproving stare. They faltered, then more bravely entered. It was in vain they pleaded. "Don't you realise dinner is only served now between seven and seven-fifteen?" They looked up at the clock: "Seventeen minutes past seven! Why, that clock is fast." "I can't help that; no dinners are served after seven-fifteen." Sadly they retired defeated by this cruel fate. "To the Bridge House," they said. So much for dinner in the College now that there is a war on.

"Yes, this is Sister speaking. Yes, lots of room yet. The more the merrier. Send him along." A few minutes later another of the inhabitants of the College was safely "embedded" in Eyes to await his M. and B. The streptococcus is claiming his victims. We look nervously at our ever-reddening throats and wonder who will be the next.

H. F. L.

Pembury Letter

HAVING invoked the aid of blubber lamps and our "household gods," we have managed to unfreeze the ink and defrost the parchment in order to pen our epistle. Even so we find our muscular movements difficult to control, and we remember with remorse those days when we used to incarcerate frogs in the ice-box in order to demonstrate the effect of cold on muscular activity. We can imagine the spirits of those Ranidæ, whose earthly bodies were frozen and then dissected, smiling at our present discomfiture.

Since our last letter we have welcomed to our midst a real live "nerve doctor" in the person of Dr. Neustatter. We can already see the hysterical contracture uncurling itself, and the subconscious being plumbed to its deepest depths. The Residents' Flat, too, has a newcomer in Ian Stewart. The "Wee Scot" has been moved from the sloth of Darenth, to our considerable activity.

Of recent days we have admitted to our wards a considerable number of soldiers, and in fact it has become an interesting problem to determine whether the bulk of a certain regiment is either in a certain hop farm or a certain hospital, somewhere in Kent! Influenza has been rampant down here, and, in addition to the Military, it has claimed the august personages of Drs. Osman and Kesson. We wish them both a speedy recovery.

Travelling has become a matter of some difficulty, because even if you can get your "pool petrol" to ignite you still have a full-time job keeping all four wheels going in the same direction. We have noticed one member of our staff (famed for his stentorian laugh) having considerable difficulty with a chain on a near-side rear wheel. However, in spite of the intense cold, our peripatetic pædiatrician still goes about in nothing thicker than a "two-way burberry."

We have been enjoying some excellent skating on a frozen lake in the district. The surface is very good, but the observant explorer will notice that it is marred by a double dent in the south-west corner. We claim that this was made by the forcible impact of our own anatomy!

N. M. J.

Orpington Letter

WE have bewailed before our use as a dump for the old and infirm under the guise of evacuation, but never did we think we would be thus used by our own flesh and blood. We waited the other day to receive a large convoy from our colleagues over the way, perhaps with some misgivings. But when they arrived there was clearly no doubt as to our fate—their reports could be easily summarised: "Till death us do part."

However, thanks to our staff, the local practitioners and the Army, we have received some more stimulating material and been able to open another ward with our numbers reaching the 200 mark. We have successfully dealt with our first two appendices, both local products, and one actually home-brewed. The latter has, we believe, stimulated a house officer to compile a work, of which the first volume should soon be ready, entitled: "Erythema nodosum as a premonitory sign of acute appendicitis, or, You never can tell."

One day one of our number was called to see one of our legion of infirm whose wedding ring was slowly causing the disintegration of a finger. Having enquired in vain for one of those delightful instruments with which we used to toy in the Front Surgery, he was deciding on the most convenient position in which to install her on the back of his bicycle preparatory to conveying her to the local jeweller when Sister Smith, with her usual resource matured by five months of Orpington, produced her latest acquisition—a Gigli saw—and with a houseman on either end, the operation was completed in a style which would have evoked the admiration of the G.O.M. himself.

We have lately been inspecting our new block, which should be ready for occupation shortly, and have been horrified by the arrangement of the theatre wing. The central passage from the corridor outside ends in the anæsthetic room, whose size is only dwarfed by the magnificence of the theatre beyond. This has four tables, and yet two washing-up basins only have been provided, and these after much protest, the original idea compelling the surgeon to scrub up in the Surgeons' Room and then make his way down the passage through swing doors into the anæsthetic room, and through this and other swing doors into the theatre. Whether lackeys were to be provided to open these doors, or whether the surgeon was intended to make an undignified entrance backwards and in a semi-bowed position is not clear. Beyond the theatre the preparation room should make a splendid dance hall when not in use. We hope that the open gas used here to heat the sterilisers will never discover the open ether being used in the theatre next door. Beyond here is the X-ray Department, which can only be approached through all the rooms already mentioned. This demented piece of planning is going to give someone something of a headache.

It is with much regret that we have had to bid farewell to Kilpatrick, who has left us for Guy's. He has been such an integral part of this community that it will be a long time before we shall be able to reconcile ourselves to his absence.

EPILOGUE

One evening a man was picked up in front of our hospital in an epileptic fit and admitted. Next day it was discovered that he was a new nursing orderly reporting to us for duty. We are not convinced that he was a fit man.

G. L. L. R.

Nursing News

PEMBURY

THE ACTIVITIES OF THE SOCIAL COMMITTEE

CHRISTMAS was, as usual, the time for ward tea parties, dances, carols, a rest from work for a few and extra work for the majority.

The first symptoms of Christmas appeared on the Thursday before Christmas with a Carol Concert in the Hospital Chapel. Nurses and Sisters formed the greater part of the choir, together with a few students. They were accompanied by the organ and violins, played by Sister Opie, Sister Scales and Nurse Hump. Miss Patterson was conductor and, in view of the short time which was available for rehearsing, produced exceptionally good results. The lessons were read by Nurse Torrens and Mr. Hallam, and a collection was made for the Sailors' Benevolent Fund, and I am told that it was well supported. The whole service was relayed to the wards and came through very well indeed.

On Christmas night there was entertainment of a very different kind. A fancy-dress dance was held in the Nurses' Home. The first prize went to a white-haired old man from the Male Infirm Ward. He came in with sticks and a limp which did not fit in with any particular nerve lesion. It transpired that he was a Guy's staff nurse. Another high spot was the entrance, well after 10 o'clock, of the housemen. Mr. Kesson, dressed and got up as a nurse, Mr. Neville, with pipe, in his clean party frock and red ribbon, and Mr. Drew as partner, were among those present.

Since Christmas, everyone has been to nearly every ward tea and done their best to make themselves ill. One enterprising ward even provided dancing after tea.

Through the kindness of Mr. and Mrs. Pattidge (Master and Matron) the Guy's nurses were entertained in the Committee Room to a Christmas dinner of truly memorable proportions. On January 5th, Christmas festivities came to an end with the Guy's Staff Dance in the Nurses' Home. Miss MacManus and Sister Marriott came over from Orpington and several of the

Honorary Staff were there. Everyone—staff, visitors and students—appeared to be enjoying themselves.

LAMENT FROM THE PROVINCES

FOUR months have we been evacuated; it feels like four years! Can it be such a short time since we started out from Guy's full of courage to meet overwhelming odds, so lightheartedly to combat all difficulties? Nothing we thought would prove too much, no obstacle so tall that it could not be surmounted, and we hoped that after all the war could not lost long —three months at the most. But four interminable months have slipped under our feet; there is not an end in sight, hardly a beginning, and we are very sick at heart and dispirited.

We are battering our heads against a brick wall of provincialism and county councils, hemmed in by petty rules and regulations, bath books and back books, and the credentials of Guy's rests on the time that we go to our beds. Sisters who were bulwarks and towers of strength have been near to breaking-point from harsh criticism and lack of understanding from those who, by the very position they hold, should show magnanimity. The practical teaching of the Nursing School, the hallmark of a Guy's nurse, has been enforcedly reduced. There is no lack of material upon which to teach, but the Ward Sisters, who are of necessity the practical tutors, are hampered by inadequate staff and lack of equipment—five bladder washouts and one complete equipment to be sterilised five times between two enamel bowls. What a waste of valuable time!

In some instances the probationers are working under the guidance of a Sister who is not Guy's. However estimable that Sister may be, is it a satisfactory state of affairs for the Nursing School and the probationers concerned that they will nevertheless be recipients of a Guy's certificate? If this is so, what difference is there between a County Council training and that which is acquired at a large pioneer training school, world-renowned, controlled by women who are leaders in the nursing world, whose administration has proved itself a thousand times. And what an opportunity for the Reception Hospitals, and yet they are like hedgehogs—ready for action, suspicious of the simplest request.

Is it to be wondered that we falter? Dare we cast our thoughts back to boiling sterilisers and boracic pots, and equipment that might be had for the asking? The Nurses' Home with its ample comfortable sitting-rooms; the Park in summertime; the Colonnade at lunch-time; dinner at 7.15 p.m., and the bandying of coffee invitations across the tables; one's own sitting-room with all its little treasures; the Revelstoke with S. Hilda and S. Florence; Matron's Office with S. May and S. Clare, and lastly, Matron herself, who solves all our difficulties and who is beyond criticism.

It's all too poignant for words.

M. E. F.

Thoughts *After* Leaving Guy's

DR. JARVIS closed his surgery door with an air of decision and finality. It is true that it was not yet quite time, but, when that combative and defiant mood surged over him, as it sometimes did, it betokened a sudden and overwhelming disgust with the profession of his choice.

A hard morning filled with banal answers to what he considered straightforward questions, the sight of some of his "debt-dodgers," as he called them, the discourtesy, nay even the dishonesty of some of his rivals—all filled him, at times, with a sense of the deepest disappointment. To him, at one time, medicine had seemed the apotheosis of all human vocations, and even in the moments of his greatest disillusionment he did not regret the years he had given to it. Putting them at their lowest value, they had, at least, given him the satisfaction which a child gets by peeping behind at a marionette show. The triviality, the insincerity and the dishonesty of much of it stood revealed in all their nakedness. Doctors, as a class, he told himself, were so ridiculously self-satisfied, vain, pontifical. He almost yearned at times for that Government office of the days before the Great War. Sitting amid a huddle of ledgers, ships' manifests and the other impedimenta of a Government office in a large seaport, he had often dreamt of himself as a doctor, although the prospect had then seemed drearily remote. He was at least subject then to a very limited number of masters. Now, he told himself, every pompous nit-wit and frowsy slut could command him, and perhaps have not the slightest intention of paying him for obeying their behests.

He laughed bitterly to himself at the thought of that "assistantship with a view." How soon that view had become blurred, and finally obli-

terated. How quickly he had tumbled to the "*familiar sickening technique*" by which one assistant was worked to death so as to give place to the next one.

Even now he could laugh—heartily and not bitterly—at the extent of that fellow's knowledge of Cardiology. "I want you (the usual formula) to go out and see a case of functional heart." Whoof! . . . that presystolic almost knocked his stethoscope off the patient's chest. "Mitral stenosis? Good gracious, I thought it was a functional heart!" There were times, too, when Jarvis, in discussing a case, would speak of the presence of "a few extrasystoles" and suggest possibly a little bismuth or bromide, only to be met invariably with the painful whine: "Why don't you give digitalis?"—for all the world like the ancient Weller and his oft-repeated reproach: "Sammy, my lad, *vy* didn't you prove an alibi?"

Then that practice of his own in the North! The joy of ownership! The ecstasy of at last working for one's wife and self and that little budding life which was soon to unfold itself. How well it had all gone until . . . He could not believe that doctors could do anything so despicable as to steal another man's livelihood. But now he knew better. It was that obese sycophant, the district nurse, who had been the agent, the "tout." It was she who had weaned away his patients to M.D. (Hon-olulu) across the way. He remembered though, with a grim satisfaction, how she had later stood her trial at the local Assizes for the murder of her illegitimate child.

All he had asked, like Mrs. Battle, was a "clean hearth and the rigour of the game." When two years later his successor was found clutching a poisoned glass and in his mortal agonies, he wondered dimly if the same tortuous game was still being pursued, and his disgust of medicine sank to even greater depths.

He often felt he could say much about the compilers of manuals on General Practice. He admired the aplomb of these authors. It was so obvious that they had not written *de profundis*, but from the security of an assured income and what might be called a "select practice." It was so simple to say "Buy a practice" or "Take a partnership" on becoming qualified. To them at least Dr. Cronin must have been the author of a new chapter in Revelations.

He remembered that sunny morning in July, 1925, when he had walked through the gates of Guy's for the last time. Though brimful of the joy of the newly-qualified, he had felt that there was a certain deep pathos in the occasion, and, as he turned up into St. Thomas's Street, he had cast a last lingering glance back. His eye had taken in the statue in the foreground, and he had noted, with a smile, a dusty little sparrow hopping incongruously, and somewhat grotesquely, on top. He wondered what had happened to all his former friends. Some had carried on a lively correspondence for a year or two, but, as the years slipped away, he had felt all the poignancy of the gentle Elia's lament: "Friends fall off; they grow unlike us; they go away; they die"—and that, he supposed, was Life.

The wail of a siren roused him from his reverie and awoke him to the fact that War had come again to disturb the already muddied waters of European politics. He picked up his bag and made his way hurriedly towards his First Aid Post. A smile greeted him here and there as he walked quickly along and, in his inmost heart, he knew that, despite the fever and the fret, nowhere, except in Medicine, could one so well win the regard of one's fellow-creatures. He remembered vaguely R. L. Stevenson's eulogy of the physician's as compared with other professions, and he knew that one did not need to sit in the seats of the mighty to earn such tributes.

The last day of the Great War seemed to spring vividly before him as if it had been only a few months ago. A clear frosty day on a muddy field, bayonet "at the point," he had been running forward with a host of yelling Dervishes, or so it seemed to him—the objective a row of leering figures each surmounted with the forage cap of the German infantryman. Then a sudden loud "Halt!" and the voice of Sergeant Philpot, his waxed moustache fairly quivering with excitement: "Boys! The Armytiss is signed and Ole Egbert's signed it!" And thus was President Ebert, of the First German Republic, perpetuated for at least one of this erstwhile howling mob. And now they were at that mad folly once more.

He passed quickly through the door of the First Aid Post, threw down his bag, and prepared himself for what the next half-hour might bring forth.

G. L. D.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Correspondence

Appointment of House Officers

To the Editor of the GAZETTE

SIR,—Your correspondent " Scandalised and Newly Qualified " is under a complete misapprehension. There is no intention on anybody's part to alter the way in which House Appointments are made. Since the war began every newly-appointed House Officer has, in fact, been recently qualified. The only ground for any criticism is that it has been found expedient that one of the Medical Officers in the E.M.S. attached to Guy's should act for a short time as a House Officer. The arrangement is a temporary one and has not involved any reduction in the number of House Officers appointed.

Yours, etc.,

P. M. F. BISHOP,

Deputy Superintendent.

Guy's Hospital,
S.E.1.

Children's Ward at Pembury

To the Editor of the GAZETTE

SIR,—I have heard with every sympathy the cry of the stork mourning for its children, and should be the first to agree that it is highly undesirable that Guy's should be unable to deal with any cases requiring admission. But I do not share the stork's known partiality for cherishing its young amongst the chimney-pots. We have now a children's ward at Pembury which is well built in almost ideal country surroundings; half of it is in the charge of a Guy's Sister and staffed by Guy's nurses. It seems a far better principle to send children down by ambulance from Guy's (as is at present being done from the Out-Patient Department) to be nursed in the country rather than materially increasing the number of cots available in London. Admittedly there are emergencies which must be admitted direct to Guy's, but many of these could travel down within a week of admission, thus relieving the pressure on the Guy's cots. If full use is made of the facilities by those at Guy's it will be possible to arrange an ambulance service to Pembury at least once a week; it should, however, be remembered that the ambulance holds ten patients and it is doubtfully practical to send it with less than eight. Also it is essential that the children should arrive either with their notes or a summary of their history!

The disadvantages and inconveniences of the present war-time scheme are admittedly many. It is therefore all the more important that we should take fullest advantage of the few real advances (of which personally I consider a children's department in the country is one) which circumstances have forced upon us.

Yours, etc.,

RICHARD W. B. ELLIS.

Pembury.

P.S.—May I add a postscript on quite a different matter? From the sympathetic and very faithful account of my lecture on the conditions of Polish refugees in Rumania and Hungary, it appears I did not make myself clear in comparing them with those of the Spaniards interned in France. What I intended to say was this: There was a striking difference between the hopelessness and lack of morale seen amongst the Polish soldiers who had been overwhelmed by a sudden tragedy, and the initiative and resourcefulness of the Spaniards who had developed a high sense of camaraderie and discipline in the course of a long campaign. Bad as the conditions of the Poles were, the needs of the many Spaniards who cannot return to Spain were, and still are, considerably greater, both physically and intellectually. There are amongst the interned Spaniards many doctors and scientists, and old textbooks in English or French are particularly welcome.

Au Revoir!

To the Editor of the GAZETTE

SIR,—May I say " Au revoir " and " Thank you " to all those men and women who were stationed at Guy's in September, October and November last. Happily our emergency services were not then required; unhappily the war continues.

Yours, etc.,

FRANK COOK.

Guy's Hospital,
S.E.1.

Pellagra and the Vitamin B_2 Complex

To the Editor of the GAZETTE

SIR,—In a clinical lecture entitled " Vitamin Deficiency in Childhood," given by Dr. R. W. B. Ellis and recently published in the *Guy's Hospital Gazette* (1939, Vol. liii, p. 408), the section on pellagra is introduced with the

statement that " it is now generally considered that this disease is due to a deficiency of Vitamin B_2, and not as at one time supposed to a toxic factor present in maize." In an accompanying table the formula of Vitamin B_2 is given as $C_{17}H_{20}N_4O_6$, and in the appropriate column pellagra is stated to result from a deficiency of that vitamin.

In view of the confusion that has existed with regard to the therapeutic and preventive properties of the various heat-stable components of the Vitamin B complex it may, perhaps, be helpful to state briefly some of the recent advances that have been made in the differentiation of these various components and in the therapeutic application of these advances.

By 1926 it had been established that the water-soluble Vitamin B consisted of at least two distinct fractions. One of these, the more heat-labile fraction, was identified as the anti-neuritic Vitamin B_1 (thiamin). The more heat-stable component, present, for example, in autoclaved yeast, could neither prevent nor cure polyneuritis, but was essential for growth in young rats. This growth-promoting fraction came to be known as Vitamin B_2 or, in America, as Vitamin G. It was soon shown that this heat-stable fraction was also active in the treatment of pellagra, in the prevention and cure of the pellagra-like condition " black tongue " which can be experimentally produced in dogs, and in the prevention of a dermatitis of nutritional origin in rats.

Gradually it became apparent that this growth-promoting fraction showing activity against nutritional dermatitis in man and laboratory animals was itself a complex and that more than one type of nutritional dermatitis exists, at any rate in laboratory animals. Thus, riboflavin, which was isolated in the crystalline form from milk in 1933,[1] is active in promoting growth in young rats, but does not prevent or cure rat dermatitis, canine black tongue or human pellagra.

In brief, the following fractions of the Vitamin B_2 complex have now been isolated and identified :

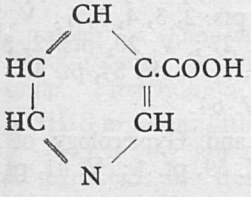
1. *Riboflavin* (Lactoflavin).—The structure of this substance, as synthesised by Karrer,[2] is shown below. It is essential for normal growth in rats, for the prevention of a nutritional dermatitis in turkeys and, according to Day,[3] for the prevention of nutritional cataract in rats. Although it is not concerned in the ætiology of the specific lesions of pellagra, it must not necessarily be assumed that it plays no part in human nutrition.

2. *Nicotinic acid.*—The recognition of nicotinic acid as a component of the Vitamin B_2 complex followed the demonstration by Warburg that nicotinic acid amide is an essential constituent of certain respiratory enzyme systems. In 1937 the amide was isolated from liver[4] and was found to be curative for canine black tongue. It was immediately tried in cases of human pellagra, and soon reports ([5], [6], [7]) began to appear showing that the specific lesions of this condition in man are rapidly cured by oral administration of nicotinic acid. It might be mentioned that coramine, a closely related compound, is also effective.

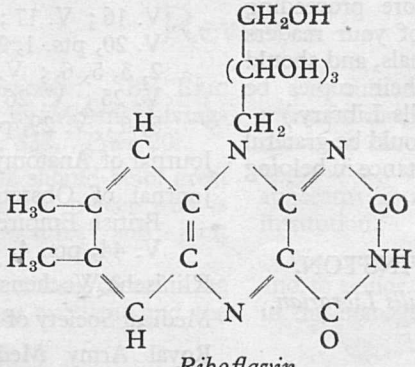
3. *Vitamin B_6* is the name given to a substance essential for the prevention and cure of rat dermatitis ; it is not effective against black tongue or human pellagra. It has recently been synthesised[8] and its formula is shown below.

The remaining heat-stable components of the Vitamin B complex are still obscure, and since little is known of the part they play in human nutrition they will not be discussed further here.

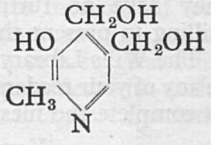
It is evident, therefore, that a statement such as that quoted from the lecture given by Dr. Ellis in which a disease is said to be due to " a deficiency of Vitamin B_2 " is ambiguous, since Vitamin B_2 is to-day given two distinct meanings—firstly, to denote riboflavin itself, and secondly to denote the whole heat-stable component of the Vitamin B complex. Only when used in the second sense is



Nicotinic acid.



Riboflavin



Vitamin B_6

it permissible to speak of a Vitamin B_2 deficiency causing pellagra in man, but it must then be made clear that the deficiency concerned is not of the riboflavin fraction, as the formula given by Dr. Ellis would suggest, but probably of nicotinic acid or its amide.

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1. Kuhn *et al.* (1933), *Ber. d. deut. chem. Ges.*, lxvi, 1034.
2. Karrer *et al.* (1935), *Helv. Chim. Acta*, xviii, 426.
3. Day and Darby (1937), *J. Nutrition*, xiii, 389.
4. Elvehjem *et al.* (1937), *J. Amer. Chem. Soc.*, lix, 1767.
5. Fouts *et al.* (1937), *Proc. Soc. Exp. Biol. Med.*, xxxvii, 405.
6. Smith *et al.* (1937), *J. Amer. Med. Ass.*, cix, 2054.
7. Spies *et al.* (1938), *J. Amer. Med. Ass.*, cx, 622.
8. Harris and Folkers (1939), *J. Amer. Chem. Soc.*, lxi, 1245.

Yours, etc.,

R. H. S. THOMPSON.

Department of Biochemistry,
Oxford.

The Wills Library

To the Editor of the GAZETTE

SIR,—Would you be so kind as to publish the enclosed lists in the *Gazette*, so that they may be brought to the notice of your readers.

1. Deficiencies disclosed at the annual stock-taking, of which no trace can be found of the borrowers.

(An appeal is made to borrowers to return these items to the Library without delay. This is particularly urgent in the case of the missing periodicals, as it is extremely difficult to replace them and the binding is held up in consequence.)

2. Periodicals required to fill gaps in the files of periodicals.

(For the past two years the Wills Library Committee have endeavoured to complete the gaps in the files of periodicals, and have been successful in obtaining many parts which have completed 119 volumes, but before proceeding further it is thought that many of your readers may have subscribed to these journals, and should they have no further use for their copies be willing to present them to the Wills Library.)

The Wills Library Committee would be grateful to any of your readers for their assistance in helping to complete the files of periodicals.

Yours, etc.,

GEORGE WINSTON,
Wills Librarian.

Guy's Hospital,
S.E.1.

The annual stocktaking disclosed the following deficiencies :—

Periodicals.

Archives of Internal Medicine. 1938, V. 62, pts. 3, 5 ; 1939, V. 63, pt. 2.

Bulletin Johns Hopkins Hospital. 1938, V. 63, pt. 1 ; 1939, V. 64, pt. 4.

Journal of Clinical Investigation. 1938, V. 17, pt. 6.

Journal of Physiology. 1938, V. 94, pt. 2.

Klinische Wochenschrift. 1939, V. 1, pts. 1, 2, 3, 4.

Textbooks.

Brain and Strauss : Recent Advances in Neurology. 1929.

Dental Board of the United Kingdom : Lectures on Radiology and Radio-therapy.

Devine : Recent Advances in Psychiatry. 1929.

Gardner : Bacteriology. 1933.

Gibberd : Midwifery. 1938.

Hadfield and Garrod : Recent Advances in Pathology. 3rd edition, 1938.

Morison and Saint : Surgery. 3rd edition, 1935.

Mayer (translated by H. R. Churchill) : Morbid Histology and Histo-genesis of the Human Teeth. 1935.

List of Periodicals required to fill gaps.

American Heart Journal. V. 1, pt. 3 ; V. 2, pt. 3.

American Journal of Medical Sciences. V. 27, pt. 2 ; V. 33 ; V. 34 ; V. 66, pt. 1 ; V. 75, pt. 1 ; V. 190, pt. 3.

Archiv für Pathologische Anatomie (Virchow). V. 1-12 inclus ; V. 208, pts. 1, 2 ; V. 235.

Australian and New Zealand Journal of Surgery. V. 1, pt. 1.

Canadian Medical Association Journal. V. 15 ; V. 16 ; V. 17 ; V. 18 ; V. 19, pts. 1, 2, 5, 6 ; V. 20, pts. 1, 2 ; V. 21, pt. 6 ; V. 22, pts. 1, 2, 3, 5, 6, ; V. 23, pts. 2, 3, 4, 5, 6 ; V. 24 ; V. 25 ; V. 26 ; V. 27 ; V. 28, pts. 2, 3, 4, 5, 6 ; V. 29, pts. 1, 2, 3 ; V. 34, pt. 4.

Journal of Anatomy. V. 64.

Journal of Obstetrics and Gynæcology of the British Empire. V. 39, pt. 1 ; V. 41, pt. 6 ; V. 44, pts. 4, 6.

Klinische Wochenschrift. 1937, V. 2, pts. 28, 40.

Medical Society of London, Transactions. V. 13.

Royal Army Medical Corps, Journal. V. 6.

Royal Naval Medical Service, Journal. V. 4, pts. 2, 3, 4; V. 5-10; V. 11, pts. 1, 2; V. 14, pt. 4; V. 15, pts. 1, 2, 3; V. 16, pt. 4; V. 17; V. 18; V. 19, pts. 1, 2, 3; V. 20, pts. 1, 2; V. 22, pt. 1; V. 23, pt. 2.

Recent Additions to the Wills Library.

Beeston (Gerald N.): "The Conjoint Finals" 3rd edition. Bale, 1938.

Bourne (Aleck W.) and Williams (Leslie H.): Recent Advances in Obstetrics and Gynæcology. 4th edition. Churchill, 1939.

British Encyclopædia of Medical Practice. Vol. 12.

British Medical Association: War Wounds and Air-raid Casualties. Lewis, 1939.

Bruce (John) and Walmsley (Robert): Beesley and Johnston's Manual of Surgical Anatomy. 5th edition. Oxford University Press, 1939.

Clarkson (Patrick): See Fifield (Lionel R.).

Conybeare (J. J.): Textbook of Medicine. 4th edition. Livingstone, 1939.

Cope (Zachary): Actinomycosis. Oxford University Press, 1938.

Dible (J. Henry) and Davie (Thomas B.): Pathology. Churchill, 1939.

Douthwaite (A. H.): See Hale-White (Sir William).

Dukes (C. E.): Urine Examination and Clinial Interpretation. Oxford University Press. 1939.

Dunlop (D. M.), Davidson (L. S. P.) and McNee (J. W.): Textbook of Medical Treatment by Various Authors. Livingstone, 1939.

Fifield (Lionel R.): Infections of the Hand. Edited by Patrick Clarkson. 2nd edition. Lewis, 1939.

Fishberg (Arthur M.): Hypertension and Nephritis. 4th edition. Baillière, 1939.

Fishberg (Maurice): Pulmonary Tuberculosis. 4th edition. 2 vols. Kimpton, 1932.

Gardiner's Handbook of Skin Diseases: See Kinnear (John).

Groves (W. Hay): A Synopsis of Surgery. 11th edition. Wright, 1940.

Hale-White (Sir William): Materia Medica, Pharmacy, Pharmacology and Therapeutics. Revised by A. H. Douthwaite. 24th edition. Churchill, 1939.

Harvey Lectures: Delivered under the auspices of the Harvey Society of New York, 1938-39. Series xxxiv, Baltimore, 1939.

Jamieson (E. B.): Illustrations of Regional Anatomy. Seven Sections. 2nd edition. Livingstone, 1939.

Johnstone (R. W.): A Textbook of Midwifery. 10th edition. Black, 1939.

Kinnear (John): Gardiner's Handbook of Skin Diseases. 4th edition. Livingstone, 1939.

Landsteiner (Karl): The Specificity of Serological Reactions. Thomas, Baltimore, 1936.

Parsons (T. R.): Fundamentals of Biochemistry. 6th edition. Heffer, 1939.

Paterson (Donald) and Smith (J. Forrest): Modern Methods of Feeding in Infancy and Childhood. 7th edition. Constable, 1939.

Practitioner: Diet in Health and Disease. See Rolleston (Sir Humphrey) and Moncrieff (Alan A.).

Riddell (Victor Horsley): Blood Transfusion. Oxford University Press, 1939.

Rolleston (Sir Humphrey) and Moncrieff (Alan A.): Diet in Health and Disease. Published on behalf of the Practitioner. Eyre & Spottiswoode, 1939.

Roxburgh (A. C.): Common Skin Diseases. 5th edition. Lewis, 1939.

Semon (Henry C. G.): An Atlas of the Commoner Skin Diseases. 2nd edition. Wright, 1940.

Young (James): A Textbook of Gynæcology. 5th edition. Black, 1939.

Reviews

Illustrations of Surgical Treatment. By ERIC FARQUHARSON. Published by Messrs. Livingstone. First Edition. Pp. 338. *Price* 20*s.*

THIS excellent little book should be of great help to any junior surgical officer who is expected to treat fractures and joint injuries.

The illustrations of the methods of reducing and immobilising fractures are excellent and the text is lucid if rather brief.

The author gives alternative methods of treatment for most of the commoner fractures, so that the book should be as useful to a surgical officer in an ill-equipped hospital, provided with archaic apparatus, as to his colleague in a more up-to-date institution.

We recommend this book to all house officers and to senior medical students who are interested in the management of injuries.

J. E. S.

Plain Verse and Random Rhymes. By R. D. MOTHERSOLE, M.D., M.S. (Lond.), F.R.C.S. (Eng.), (Guy's, qual. 1888). Published by John Read, Bolton. Pp. 60.

IT is a joy to find a medical man who can combine so gracefully an interest in his profession with such versatility of thought and expression. The contents of this little book have been composed over the past sixty-five years. The first poem, " An Elegy on a Ferret," was written at the age of nine (in 1874) and discloses at that tender age the author's literary prowess and his leanings toward surgery: " . . . boys Did skin it, take its entrails out, And on a rafter poise its flesh." There follow some verses which are partly philosophical, partly descriptive.

After a B.M.A. meeting the author is pleased " to leave the crowded noisy place of arguments on secrecy and fees ; To watch the brisk activities of bees. . . ." Then follow some descriptions of towns the author has visited, and we come suddenly upon a short verse, " Love's Insight." Here the author is plainly happy, lightly and sweetly correcting the suggestion that " love is blind " because " the truth should run That love discerns what others cannot see." He is not ashamed of his belief in the Almighty, but shows in several verses how he reconciles his faith with his knowledge of science. An allegory follows which seems to remind us of Milton.

The author now becomes rather heavily romantic. We breathe again as the page opens on " The Death of the Leucocyte." This is the sad story replete with medical terms of the fate of a macrophage which dies in conflict with an anthrax bacillus. Then comes " The Extern "—still topical after many years. Perhaps we should substitute for " Meadows, Galabin Playfair," the more modern textbooks, " Gibberd, Queen Charlotte's and Shaw."

The " Song of Guy's " set to a racy tune would sound well in a Residents' Play or Starlings' Revue. Then follow some shorter verses—some ordinary, some ingenious. We like the " Definition of Poetry " as the " sublimate of prose." The last poem is called " Breakfast in Bed " and throws into relief the modern poet's zest for stressing the unpleasant instead of the beautiful. Coming as it does after so many charming verses, it seems utterly horrible and thus, we suppose, succeeds in its purpose. We are glad, however, that this old Guy's man has kept alive his sense of humour and of beauty, and that he has given us his writings to remind us to do the same.

H. F. L.

Operative Dental Surgery. By J. B. PARFITT and W. E. HERBERT. Published by Messrs. Edward Arnold & Co. Fourth Edition. Pp. 474 with 194 Illustrations. *Price* 25*s.*

IT is a pleasure to welcome a new edition of this work. Since it was first published in 1921 it has been accepted as the standard English textbook on this subject. It is now brought thoroughly up to date, and the original author has the assistance of Professor Herbert, who is actively engaged in the teaching of operative dentistry.

The writers have done well to preserve the essential character of the previous editions. Some chapters are maintained in their original form with only minor alterations, whereas others are entirely rewritten to make them conform more fully to modern conceptions. The subject of pulpless teeth, full as it is of controversy, is dealt with in a lucid manner, and without the dogmatism which is so often encountered. There is a series of excellent radiographs to illustrate the text. The modern conservative treatment of paradontal disease receives its proper place in this work, even though no attempt is made to indicate more than the broad outlines of the principles involved. There is no part of operative dental surgery which is not fully dealt with, and the wealth of practical experience of the authors is passed on to the reader.

This is a book which fully maintains the excellent reputation which it has enjoyed in previous editions, and is one to which both practitioner and student will make constant and useful reference.

F. S. W.

BOOKS FOR NURSES

Textbook of Dietetics and Cookery for Nurses. By ROSAMOND WANSBOROUGH. Published by Messrs. Faber & Faber. *Price* 3*s.* 6*d.*

MISS Wansborough's book is well written. It holds the attention from the beginning by an introduction dealing with the rules and ethics laid down by physicians as early as 50 B.C. about the type and amount of food to be given in various disorders. It is interesting to note how little we have deviated from these first principles. The classification of foods, including vitamins, is simply set down, and many recipes suitable for invalids are given. Stress is put upon the preparation of food, the way in which it should be served, and the ensured comfort of the patient when eating. So often these points are made to appear of secondary importance to young nurses, when in reality they are as important to the well-being of the patient as the actual choice of food.

M. E. F.

Special Tests and Their Meanings. By R. GORDON COOKE, M.D., M.R.C.S., L.R.C.P. Published by Messrs. Faber & Faber, Ltd. *Price 3s. 6d.*

HERE is a long-awaited book containing descriptions and explanations of the commoner tests employed in the investigations of the various systems of the body: the Alimentary and Cardio-vascular System, the Respiratory and Nervous System, and the Genito-Urinary System. X-ray examinations are clearly and briefly explained, and there is a chapter on special tests and skin tests.

This is a book which both students and nurses will find equally useful. M. E. F.

Illustrations of Bandaging and First Aid. By LOIS OAKES, S.R.N. Published by Messrs. Livingstone. Pp. 243. *Price 6s.*

ALL nurses who have regularly received the *Nursing Illustrated* will not be surprised to see this volume. Miss Oakes has written the bandaging pages since the paper first appeared.

The book is a collection of these articles with additional matter, illustrations and First Aid Treatment. The photographs, showing each turn of the bandages, are exceptionally good, and on this point alone should appeal to nurses who struggle manfully in their first year to overcome the intricacies of bandaging.

The chapters on First Aid should prove useful not only to the nurse in training but to the Nursing Auxiliaries and V.A.D.'s, whose knowledge so lately acquired needs for background a clear, concise work with accurate detail, such as Miss Oakes' book provides.

Appearing at a time when Bandaging, First Aid and the treatment of Fractures looms foremost in one's mind, the book should be warmly received.

N. S.

Sport

Rugby

Guy's v. An Army XV.

(At Honor Oak Park, on Saturday, Nov. 15.)

THE Army fielded a particularly strong side and after a splendid game, the visitors gained a well deserved success by two placed goals and a try (3 points) to nil.

The schemer in chief was R. G. Oxborrow, the Richmond and Army stand-off half, who took the ball at all angles and generally played well in a rousing contest.

He and his partner, J. E. Watrow, with A. T. Dawkins (Centre) were a great trio and their skill often beat the defence.

Forward too, the Army had the advantage and their internationals J. Hegan and S. R. Couchman were always prominent, leading many rushes.

After crossing the line several times without scoring the visitors went ahead through Couchman whose try was converted by Oxborrow. Then Hegan forced his way over and the teams changed ends with the Hospital eight points in arrears.

The second half produced one try, Dawkins crossing after a spectacular run and Couchman added the goal points.

Team.—T. L. T. Lewis; P. C. Gartrell, L. Babrow (Capt.), R. U. F. Kynaston, J. P. Crawford; J. van A. Steytler, R. N. H. Vann; H. F. Osmond, J. C. Bulstrode, J. R. D. Williams, G. A. Albers, T. W. Renton, R. C. Mullins, D. W. Fuller.

Guy's v. St. Thomas's

(At Honor Oak Park on Sat. Nov. 25th.)

ST. Thomas's made one of their rare appearances at Honor Oak Park and won a very interesting game by 2 placed goals and a dropped goal (14 points) to a try (3 points).

St. Thomas's, indeed, were worthily represented, and they won on their merits, if only because they were the faster team behind, an advantage which A. H. Rea, at stand-off half-back, saw should be well used. Guy's also had their chances, but their insides were more often than not swamped by a fast St. Thomas's pack, and dodge and feint as often and as well as he could J. Van A. Steytler was never quite able to get his three-quarter backs on the move. These war-time matches provide such good, keen football by both sides that it may be unfair to single out one individual, and yet mention must be made of the play on Saturday of J. P. Crawford, who was in an inspired mood, his kicking, running, tackling, and backing-up being truly splendid.

St. Thomas's started off the game with a vehement rush which was met by some noble defensive play by Guy's. B. W. T Ritchie, who played well all through for St. Thomas's, once got away on his own, but Crawford was there to hold up what threatened to be a dangerous move. Both teams were playing at a grand pace, and the St. Thomas's forwards were especially quick on the loose ball whenever there was a sign of a fumble. The first

try arose in the first place from a false pass by the Guy's insides, the ball was rushed from the half-way line and the St. Thomas's forwards all but took it over the line. A loose scrum and the ball was whipped back to Rea, who plunged over the line for Ritchie to kick a good goal with a heavy ball. Soon afterwards Rea went right through the opposition until he was held up just in time by T. L. T. Lewis, and a promiscuous drop was made at goal which raised the ball no more than head-high. The Guy's forwards, with M. R. Mullins and A. G. Albers going great guns, then attacked furiously for a time, and it was Steytler's turn to try a drop at goal, but again the ball refused to find altitude. Mullins made a good attempt to kick penalty goal, and once Charlton saved an awkward situation by making a mark when apparently surrounded by a host. Steytler then came into his own with a run of the footballer of true class, but a St. Thomas's forward was across in time to drag him down, and before half-time St. Thomas's had scored again when A. H. C. Walker went off at a fine speed to touch down for a try which Richie again converted.

Team.—T. L. T. Lewis; D. W. F. Charlton, L. Babrow (captain), R. U. F. Kynaston, J. P. Crawford; J. van A. Steytler, R. N. H. Vann; M. R. Mullins, H. F. Osmond, D. N. Fuller, J. R. D. Williams, J. C. Bulstrode, R. M. Sharpe, A. G. A. Albers, T. W. Renton.

Hospital Information, etc.

Notice

LEVERHULME RESEARCH FELLOWSHIPS, 1940

Application is invited for (i) Fellowships or (ii) Grants in aid of research. The Fellowships or Grants are intended for senior workers who are prevented from carrying out research work by routine duties or pressure of other work. They are limited to British-born subjects normally resident in Great Britain. In exceptional circumstances the Trustees may waive the condition as to residence. The Trustees are also prepared to consider applications from groups of workers engaged upon co-operative programmes of research—particularly from those engaged upon long-distance programmes or in Institutions in which the normal facilities for research have been curtailed by the War. The duration of the awards will not normally extend over more than two years or less than three months and the amount will depend on the nature of the research and the circumstances of the applicant. Forms of application may be obtained from the Secretary, Dr. L. Haden Guest, M.C., M.P., Leverhulme Research Fellowships, Kingscote House, 1, Watergate, Blackfriars, London, E.C.4. Applications must be received on or before March 1st, 1940. Awards will be announced in July and will date from September 1st, 1940.

SKIN OUT-PATIENTS

Dr. Forman will be in Out-Patients on Wednesday mornings only, and not on Wednesdays and Thursdays as stated in the Out-Patient Time Table published in the last issue of the *Gazette*.

Pass List

UNIVERSITY OF LONDON.
FIRST EXAMINATION FOR MEDICAL DEGREES.

(For Internal Students.)

December, 1939.

R. F. Barclay	F. F. Jerichower
Z. Cohen	J. V. Kent
M. J. Cutler	K. Lewis
A. J. P. Graham	A. V. Morse
G. J. Haas	H. J. Sayani
W. T. Harrett	J. S. Smith
P. F. Howe	R. C. W. Thompson
E. A. Humphrey	J. D. Whitehouse

(For External Students.)

K. R. Brookes.

M.D. EXAMINATION.

December, 1939.

BRANCH V.

Hygiene.

H. A. Leggett, D.P.H.

UNIVERSITY OF OXFORD.
DEGREES OF BACHELOR OF MEDICINE AND BACHELOR OF SURGERY.

Pharmacology and Therapeutics.

December, 1939.

J. Pinching.

Pathology (Old Regulations).

P. A. L. Roberts.

Forensic Medicine and Public Health.

P. R. Cooper.

Medicine, Surgery and Midwifery.

G. L. L. Reynolds E. Smith

Changes of Address

Major Frank Cook, F.R.C.S., No. 26 General Hospital, R.A.M.C.

Herbert Corin, O.B.E., 22, Upper Wimpole Street, W.1. *Welbeck* 4291.

EDS. { E.B.R. H.F.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LIV 10*th February* 1940 *Number* 1345

PASSIM

FROM his professorial chair in Cambridge our late teacher has reviewed the future of clinical teaching.* In the midst of the conflict and the strife we at Guy's have tried to think constructively about our problems, but in vain. Professor Ryle has been able to summarise the present position, and to look beyond towards improvements in the future. Can any good thing come out of the E.M.S.? With the clarity of thought and expression which appealed to us so much when he taught at Guy's, Professor Ryle considers the present state of flux as a starting-point for new and better principles of teaching, as well as the end of much that is out of date and obsolete. He regrets the present lack of co-operation between the teacher and his students, a state enforced by the exigencies of consultant practice. He must be thinking of the good old days when the Physicians had to live in St. Thomas's Street and the Take-in Surgeon lived at the Hospital. He feels the registrar has rather come between the Honoraries and their students; but surely they bridge the gap which he deplores, in being able to get to know the students personally and to keep abreast with modern advances. He speaks of the "drama" of the operating theatre and of the many hours spent there which might be more profitably used: we have always found, however, that the student commencing his clinical studies is surprised at the informality of the theatre, and the lack of the film-begotten "drama," and at the same time the ward clerk's visits to the theatre encourage him to take a personal interest in his patients, and to begin to play a part, though at first a humble one, in their treatment.

Professor Ryle is eager for the State to accept the responsibility of organising medical education on an efficient basis; this responsibility, as shown by the letter published later in this issue, is not yet the concern of the Ministry of Health. He suggests that consultant teachers should be paid a basic wage by the State, so that they need not spend so much time in practice. He advocates the appointment of directors of the various branches of medical and surgical teaching, who should be men of wide experience, fully devoted to their task of passing on their knowledge. We are sure this measure would improve the pass list in examinations, but we are uncertain whether it is in keeping with the unique tradition of Guy's teaching. This has always served to stimulate the student to listen critically to all his varied teachers, so that in practice later he learns which of them to follow. There would be a danger that a director of medical teaching might influence the students to accept his way of thinking.

Professor Ryle rightly condemns the practice of increasing the number of students entering the medical schools in order to swell the finances of the latter. He remarks that assistance from the State would render this practice unnecessary. The problem of curtailing entries, however, must be a difficult one. Entrance examinations are liable to exclude many students who would mature to become excellent doctors later. The love of medicine, the true necessity, is easy to profess at the outset, but difficult to maintain when studying anatomy or struggling with Finals. Hence we suppose come the "languishing ethical codes" of present-day medicine. We are grieved to hear the truth about our profession as it percolates the sheltered walls of this Hospital. We cannot deny that there is much amiss. But how quickly does the good become forgotten and lie buried, while the evil lives. Professor Ryle can feel satisfied that his article will encourage us to press on, in

**Lancet* 1940, i, p. 157.

spite of the present insecurity, for the time when the teaching and choice of students will be more as he desires. We wish him success as he stands for election to a seat in Parliament.

THE editorial pen seems at last to have aroused some comment. We publish in this issue a letter from a reader who seems to have misunderstood the purpose of our remarks. We attempted to compare the democratic management of Guy's with the bureaucratic management of an E.M.S. hospital. We feel there is a difference which by comparison renders the " clogging feudalism " of Guy's a thing to be desired. But we are not in the least complacent about either peace-time or war-time Guy's. Both have many defects which have often been emphasised in our columns.

THE Stork is pleased. There are signs that Salomons Centre will soon be resuming its former function. Half of Victoria will be open to accommodate difficult cases from the District. Children will still have to be taken into the General Wards. And yet the Stork is troubled. Strange rumours are circulating. The ward it strove to build and equip is threatened from a new angle.

It appears that surgeons, although very friendly off duty, do not like working together in the close proximity enforced by the Emergency Theatre. We never thought they would, and thus wondered why ever they came back to Guy's in such numbers. Thus disquietened, they turn in search of other accommodation. Their eye falls upon a ward—pleasant to the eye and new, yet partitioned as they would prefer. This is the New Children's Ward, which they would seize from its rightful owners and alter to take their lights, their tables and their tools. We hope the Governors will sense the danger ere it is too late. It would be so difficult to move everything once the war was over. It is also very dangerous, so they say, to be near the roof these days.

Psychology for Dental Surgeons

A Paper read before the Metropolitan Branch of the British Dental Association at 13 Hill Street, London, W.1, on 20th April, 1939, by R. D. Gillespie, Esq., M.D., F.R.C.P.

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MR. CHAIRMAN and GENTLEMEN,—I feel that the title of this lecture must have raised high hopes which I am destined to disappoint. I take responsibility for the title; but in so far as it may imply that I am going to tell you how to handle your patients better it is, I am afraid, misleading, for in the first place I would not dare to assume such a role, and in the second it can be said that psychology is either very simple and obvious or very complicated, remote and unexpected. The simple and obvious are the property of everyone; the remote belongs almost to another world—the world which is usually referred to as the unconscious. The former it would bore you to recount; the latter may have at the most a curious interest for you. In order, however, to make this talk as useful as possible, I propose to interpret the title in a general way, as meaning the relationship of psychological medicine to dental surgery.

THE TIMID PATIENT

The most frequent problem of the purely psychological kind that I suppose confronts you is that of the timid patient. He, or she, is afraid of one of two things—of the anæsthetic, or of the extraction itself. Fear of the tooth extraction is not always fear of the pain. It is sometimes, as we shall see, fear of losing the tooth itself, based on unconscious association.

Conditioned Reflex.—The simplest explanation of such fears, namely that they represent a conditioned reflex, holds only for some, and probably a minority of instances. I have met persistent fear of the dental room for which no other explanation could be found than that a sensitive child had been rather casually dealt with in the out-patient dental department of a hospital twenty-five years before. Going to any dentist thereafter stirred up a memory of the original experience, with the appropriate emotion, but the emotion only appeared on the surface; the memory had been forgotten and, in fact, to some extent repressed on account of its unpleasantness. The remedy for such a simple state of affairs is " deconditioning " by a modern technique of kindly and virtually painless approach; and I have seen such a fear of very long standing overcome in this way.

General Fearfulness (hysterical type).—There is another group of timid patients, who may be said to be generally fearful. They are ordinarily described as " poor stuff," or as " having no guts." Their fear of the dentist's chair is part of their

general fear of life. I remember a woman of this type who had made a complete failure of her marriage because she was afraid of its responsibilities. She had disconcerted her husband in the hotel where they stayed on their honeymoon by shrieking at the top of her voice at night when he attempted intercourse. This was in fact never achieved, and she ultimately retired from the marriage to live a sheltered life in her old home in the country. She displayed the same degree of apprehension of the dentist as she did of her husband, and developed a state of acute apprehension for several days before an extraction which had been recommended. It is difficult to know how to over come such an extreme fear of this kind. I have, however, known it successfully overcome in a generally timid male by premedication with avertin, but in the case of this woman this was not successful. She developed as much apprehension of going into a nursing home overnight as she had had of the extraction itself. The difference between the two cases may have depended on the fact that the male patient was actually afraid of the development of pain itself, while in the woman the extraction may have had unconscious, symbolic, significance. In another woman patient who also was frigid and hysterical, and who was readily hypnotisable, an attempt was made to induce anæsthesia for the dental extraction with hypnosis, but the attempt was only partially successful. This was the only occasion on which I had found it impossible to produce a deep hypnosis in this particular patient. Again the explanation may have been that the extraction had an unconscious significance for her which extended far beyond the real situation. Obviously the treatment of such fears would ideally be of the psychological analytical kind; but in the first woman this proved impossible after prolonged trial, while in the second, although she was ultimately cured, it was not possible to produce the result in time for the dental extraction. These were, however, both very difficult patients with personalities of a very abnormal and immature type: the first one introverted, cold and lackadaisical, the second a kind of Peter Pan.

Fear of Anæsthesia: Fear of Death.—Of the less common sources of fear, those associated with the general anæsthetic rather than with the dental operation, are perhaps simpler. The experience of a general anæsthetic has several possible psychological connotations. The fear may be founded in the idea of suffocation which many people associate with the wearing of a mask, or with the sensations which they have previously experienced on being given gas. This, it seems to me, can be a primary or innate fear, and the fear in the last analysis is a fear of death itself. Clearly this is a matter which concerns the anæsthetist and his technique. The fear of anæsthesia itself is a fear of unconsciousness and the fear of unconsciousness is often a fear of death. Some people have a fear of sleep in the same way, because of the similarity between the popular idea of sleep and death.

Fear of Inner Impulses.—But unconsciousness also means loss of control, and some people are so afraid of their own impulses and feel so guilty about them that the idea of loss of control fills them with acute terror. The fear of anæsthesia is then similar to the fear of insanity that many neurotic people have in their waking lives. By inner impulses I am not thinking of conscious things like a tendency to use obscene words, but the fact that many people carry with them from their childhood a vivid impression of the strength of their inner impulses to destroy those who incur their dislike. Neurotic illness often represents attempts to defend oneself against displaying aggressive or destructive tendencies towards brothers and sisters or parents; while in other cases it represents a defence against unconscious (*i.e.*, repressed) incestuous impulses. Failure to control such impulses is equivalent in the patient's opinion to insanity. They are regarded as liable to break out as soon as conscious control is withdrawn; hence the fear of any form of unconsciousness.

Probably in other instances this fear of unconsciousness is a fear of external danger, resulting from helplessness. The danger, however, is not really external. What is feared is the patient's own sexual impulses, which reveal themselves as a phantasy of helplessness and therefore of easy victimisation by the operator to whom the patient attributes similar desires. The fortunately rare occasions on which a doctor or dentist is accused of rape by some hysterical woman illustrates the existence of such phantasies.

Unconscious Sources of Fear of Extraction.—There are other possible mental associations with operations on the mouth, teeth or jaws which may interfere with that confident relationship which the dental surgeon aims at, and it will perhaps be some consolation to him to know that where he fails to get his patient into the appropriate frame of mind, it may be for reasons that lie beyond the reach of any dental technique no matter how skilful, and indeed sometimes beyond the reach of any technique whatsoever. These reasons are also of the unconscious type, the discovery of which we owe almost entirely to psycho-analysis.

Phylogenetic Connection between Teeth, Jaws and Emotion.—It will make this view more under-

standable and possible of acceptance if account is taken of the biological significance of the jaws and teeth, and their phylogenetic association with the emotions. You may remember that Darwin, in his " Expression of the Emotions in Man and Animals," described certain emotional manifestations as " serviceable associated habits." He says : " Certain complex actions are of direct or indirect service under certain states of the mind, in order to relieve or gratify certain sensations, desires, etc., and whenever the same state of mind is induced, however feebly, there is a tendency through the force of habit and association for the same movements to be performed, though they may not then be of the least use."

For example, a man who rejects a proposition will shut his eyes or turn away his face—as if he would not see the thing. A motion such as shutting the eyes, originally induced by a desire not to see something, is now induced whenever a similar state of mind, *i.e.*, refusal, is induced.

It is well known that in anger some people bare their teeth. Presumably this is a serviceable associated habit; originally our ancestors used their teeth in their contests for survival, and anger was aroused at the same time. The mere arousal of anger in some people produces a vestigial remnant of an old association, in baring of the teeth. Darwin gives many examples of the association between the emotion of anger or at least of thoughts of attack, with movements of the lips and jaws, and baring of the teeth.

He remind us that Shakespeare sums up the chief characteristics of rage as follows :—

" In peace there's nothing so becomes a man,
As modest stillness and humility ;
But when the blast of war blows in our ears,
Then imitate the action of the tiger :
Stiffen the sinews, summon up the blood,
Then lend the eye a terrible aspect ;
Now set the teeth, and stretch the nostril wide,
Hold hard the breath, and bend up every spirit
To his full height ! On, on, you noblest English."
Henry V, Act III, Sc. 1.

Darwin says : " The lips are sometimes protruded during rage in a manner the meaning of which I do not understand, unless it depends on our descent from some ape-like animal. Instances have been observed, not only from Europeans, but with the Australians and Hindoos. The lips, however, are much more commonly retracted, the grinning or clenched teeth being thus exposed. This has been noticed by almost everyone who has written on expression. The appearance is as if the teeth were uncovered, ready for seizing or tearing an enemy, though there may be no intention of acting in this manner. Mr. Dyson Lacy has seen this grinning expression with the Australians, when quarrelling, and so has Gaika with the Kaffirs of South Africa.

" Dickens, in speaking of an atrocious murderer who had just been caught, and was surrounded by a furious mob, describe the people as ' jumping up one behind another, snarling with their teeth, and making at him like wild beasts.' Everyone who has had much to do with young children must have seen how naturally they take to biting when in a passion. It seems as instinctive in them as in young crocodiles, who snap their little jaws as soon as they emerge from the egg.

" I inquired from Dr. J. Crichton Browne whether the habit was common in the insane whose passions are unbridled. He informs me that he has repeatedly observed it both with the insane and the idiotic, and has given me the following illustrations :—

" Shortly before receiving my letter he witnessed an uncontrollable outbreak of anger and delusive jealousy in an insane lady. At first she vituperated her husband, and whilst doing so foamed at the mouth. Next she approached close to him with compressed lips, and a virulent set frown. Then she drew back her lips, especially the corners of the upper lip, and showed her teeth, at the same time aiming a vicious blow at him. A second case is that of an old soldier who, when he is requested to conform to the rules of the establishment, gives way to discontent terminating in fury. He commonly begins by asking Dr. Browne whether he is not ashamed to treat him in such a manner. He then swears and blasphemes, paces up and down, tosses his arms wildly about, and menaces anyone near him. At last, as his exasperation culminates, he rushes up to Dr. Browne with a peculiar sidelong movement, shaking his doubled fist and threatening destruction. Then his upper lip may be seen to be raised, especially at the corners, so that his huge canine teeth are exhibited. He hisses forth his curses through his set teeth, and his whole expression assumes the character of extreme ferocity.

" Dr. Browne also informs me of the case of an epileptic idiot : If the annoyance be repeated, he draws back his thick lips and reveals a prominent row of hideous fangs (large canines being especially noticeable), and then makes a quick and cruel clutch with his open hand at the offending person. If, when thus incensed, a handkerchief, book, or other article be placed into his hands, he drags it to his mouth and bites it.

" Sir C. Bell states that the actor Cooke could express the most determined hate ' when with the oblique cast of his eyes he drew up the outer part of the upper lip and discovered a sharp angular tooth.'

" The expression here considered, whether that of a playful sneer or ferocious snarl, is one of the most curious which occurs in man. It reveals his animal descent; for no one, even if rolling on the ground in a deadly grapple with an enemy, and attempting to bite, would try to use his canine teeth more than his other teeth. We may readily believe from our affinity to the anthropomorphous apes that our male semi-human progenitors possessed great canine teeth, and men are now occasionally born having them of unusually large size, with inter-spaces in the opposite jaw for their reception."

PSYCHO-ANALYTIC THEORIES

(*a*) *Of Mouth Erotism and* (*b*) *of a Connection between the Mouth and Aggressiveness.*

The psycho-analytic observations and speculations about the mouth fall into two stages and two groups. The two stages are first the suckling stage and later the biting stage. The two groups of feelings that are discernible are the erotic and the aggressive.

They believe that the pleasure a child gets from sucking is derived not only from taking food, but has an erotic component as well. They say that this kind of pleasure in mouth activities is exhibited in various guises in adult life, not only obviously in such ordinary activities as kissing, but in perversions and even in certain traits of character.

Effect of Suckling, etc., on Character.—Children whose suckling stage was satisfactory are declared to emerge to the outer world as optimists, or, in extreme cases, as lazy ne'er-do-wells since they expect life's favours to come to them as easily as their mother's milk. On the other hand, frustration of mouth satisfaction, as in too-early weaning, is said to produce pessimists, or on the other hand people who are always asking for something. These seem extravagant conclusions: I give them here in contrast to the traits that are said, more understandably, to be related to the biting stage with its allied aggressive feeling.

Generosity, from identification with the generous mother, is supposed to be another characteristic of those whose mouth interests have been well satisfied; and brightness and sociability are attributed to the same source of optimism.

Aggressiveness.—Biting is a practice which for dentists has more interest. Biting can be both aggressive and erotic in the quality of feeling or emotion attached to it. A child either over-indulged or disappointed in the sucking period is said to take special pleasure in biting. Evidence of this sort is to be got from patients' dreams. A child which has vaguely felt itself unwanted at the breast is apt to indulge in phantasies of biting the mother's breast. Such a child is often afterwards apt to indulge in other aggressive phantasies towards the parent.

The connection between biting and aggressiveness is seen much more obviously in everyday language—" One sets one's teeth," *i.e.*, with determination. People speak of a " biting reply." If you watch a child with well-marked aggressiveness, and especially with sadistic tendencies, you will see it set its teeth when angered or when setting about some unhappy cat on whom it has chosen to exhibit its cruel impulses. From this point of view it is instructive to examine the drawings of children suffering from morbid degrees of fear (" neurotic anxiety "). These will sometimes be found to include drawings of fierce-looking toothed monsters.

The connection between teeth and biting on the one hand, and aggression or actual sadism (*i.e.*, aggressiveness and erotism combined) on the other, is of some importance. Aggressive or sadistic trends are commonly repressed in the interests of society, *i.e.*, they become largely unconscious, but they may be aroused associatively, and one of these associative paths is any assault upon the teeth themselves, such as a dental operation, or by association with any operation on the jaw. That this is not mere speculation is supported by one or two cases which I have seen, referred to us by the dental department of the hospital. But before citing these it may interest you to have recounted the psychological consequences that are said to arise from reinforcement of the ordinary pleasure in biting, and its subsequent repression in accordance with social requirements.

Envy, hostility and jealousy are said to be common consequences of an accentuation of the early interest in biting, and this is thought to be explained in some cases by the fact that an elder child who has reached the teething and biting stage has to watch a younger one enjoying the pleasures of sucking. These tendencies, when repressed, are sometimes too strong to remain under complete control, but, as the individual's conscience under social pressure will not admit their existence, they are dealt with by " projection," *i.e.*, they are attributed by the subject not to his own mind but to those around him, so that he may suffer ultimately from delusions of persecution.

Other characteristics are supposed to be derived from reinforced mouth interest, *e.g.*, ambitiousness.

There is another rather unexpected connection between teeth and the erotic aspect of life. Some children seem to picture another orifice, the

vagina, as being furnished with teeth. This concept may linger on in the unconscious memory into adult life and even reappear in dreams. It may be responsible for some cases of impotence and in some degree for some cases of homosexuality, since the unconscious image of a " vagina dentat " inhibits approach to the female, the latter's body being conceived as dangerous and likely to damage the male organ.

Case Records Illustrative of Possible Connections between Teeth, Character and Mental Illness.—I have witnessed the outbreak of a paranoid psychosis —of delusions of persecution—after the extraction of teeth, and this gives some support to the association of the jaw and teeth with aggressiveness of character. Similarly, the association of hypochondriacal preoccupation with the teeth and jaws with aggressiveness of character in an elderly man who has received many disappointments in life, was suggestive of reinforcement of his aggressiveness as the result of the frustration of his ambitions.

There is a tendency for people when disappointed to revert to more childish modes of behaviour, as everybody knows. Preoccupation with the teeth may represent a return to early phantasies of biting our enemies, repressed, however, by adult conscience and therefore expressing itself as a compromise in the form of hypochondriacal symptoms connected with teeth. Another example of the association of mouth preoccupation with aggressiveness was furnished by a woman aged 43, whom I regarded as suffering from a hypochondriacal depression and who was convinced that her jaw was rotting. She said: " At night I know to my sorrow my mouth is useless. If you can help me get my face right, my mental capacity will return. I've lost all my friends. No one believes me." This woman had frequented hospital for more than a year. Extracts from her letter showed an unusual amount of hatred and aggressiveness even for a psychotic patient, and, associated with this, a paranoid conception of the attitude of the environment.

Extract from Letter.—" I feel that if my chance of help hangs on the good offices of the Dental Surgeon, it is a very slender one. This man has already done all he can to frustrate my efforts to get well. Dr. B. found by X-ray the diseased bone in my jaw. I saw Mr. C. He X-rayed my face and found cause to operate. The pain still continued in my face, and on turning to speak to him I found him convulsed with laughter at my expense. . . .

" I was promised a bed to get both sides right. This bed was promised and promised, the pain in my jaws and nerves crazying me. These gentlemen thought it witty to bait me for each other's amusement, of course I never failed to rise to the bait. The head surgeon examined my jaws and assured me that my face was all right. I realised what a cruel lie it was. I went everywhere to get treatment (I had to tell lies) to get them to look at me.

" There was no deluding myself that this man was most antagonistic. The pain still remains in my face . . . it crazes me. The trouble in my mouth shames me and makes me feel as if I were a leper. . . . They are there to serve the sick and jeered and mocked me as well as injured me. . . . I did hate him and thirsted for revenge. . . ."

Besides association with aggressive states of mind like hate, envy and jealousy, there are other kinds of unexpected and often unconscious significances which a tooth, and especially loss of a tooth, may have. The evidence for this is derived partly from anthropology. The tooth-losing dream, as Seligman has pointed out, is very widespread in the world. It is one of the commonest types of dream in places as far apart as England and China.

" The tooth-losing dream, recorded from Europe north and central, Africa (Sudan, Ashanti), Asia (Palestine, Persia, the Nagas, in Malaysia, *i.e.*, the Straits, Java, Ashin, China and Japan), has everywhere the same significance. On present evidence this seems to be the most universal of type dreams, with everywhere the same interpretation, namely, the loss of a near relative or friend, though not infrequently there is a modification of meaning according to the particular tooth lost or whether it is in the upper or lower jaw."—(Seligman, " Anthropology in The Mind," Ed. by McDowell, 1930.)

Psycho-analysts find both this meaning and others. For example: " Every analyst is aware of the manifold symbolic meaning of such a dream. The tooth that drops out symbolises on the one hand castration, and on the other some person whom the dreamer knows and whose death he desires in a dream. Thus a near relative or friend is made equivalent to a part of the body which has to be expelled. We see at once the resemblance with the psychology of delusions of persecution. We should particularly note the ambivalence of the subject's feelings which is manifested in his identification of a person with a portion of his own body. To compare a person with a part of one's own body which is the object of a specially high narcissistic estimation is without doubt a proof of exceptional love. In German we often call a loved person ' my heart ' (*mein Hertz*), and we say of a mother that she loves her

child as the apple of her eye. When a man likens someone to his tooth, as so often occurs in dreams, it is as much as to say that although he is loth to lose a part of himself he can nevertheless do without it since he possesses plenty more. Indeed, the dreamer often observes that the loss of his tooth or its extraction is quite painless; from which it may be inferred that the loss of that person would not be so painful for him after all."—(Abraham, 1927.)

That this second meaning of the loss of a tooth —namely, that it symbolises castration—is not merely fanciful psycho-analytic speculation is shown by occasional remarks of psychotic patients. It is surprising how often the remarks of psychotic patients confirm psycho-analytic theory. For example, recently I heard of a schizophrenic man who, after the extraction of a tooth, declared he had been emasculated.†

CLINICAL SYNDROMES IN WHICH MOUTH PREOCCUPATION MAY OCCUR

Some patients are perhaps more deceptive to the dental surgeons who may be persuaded to operate on them than most patients would be, in that their hypochondriacal complaints are confined to their jaws. The clinical picture in hypochondriasis and hypochondriacal depression is usually more diffuse than this. For example, a woman of 56 who complained of pain in her jaws, and of "simply ramping with it," showed a wide range of hypochondriacal ideas by adding that she always suffered from her nerves, "that she shook always and jumped at anything." She added that whereas now she got pain in her jaw she used to get pain in her neck. She also spoke of "womb trouble," and revelled in medical details.

Cases of this sort tend to be distinguished clinically (*a*) by their description of their pain as "agonising" and (*b*) by their multiplicity of symptoms. This woman in addition presented a feature reminiscent of the "parasitophobia" of the dermatologists, in that she brought a sample in a bottle of what she described as the "stuff which came from her mouth."

Not all cases of mouth hypochondriasis, however, present these features. In several I have seen the hypochondriacal preoccupation has been limited to the mouth, and these were more difficult to diagnose. They complain, however, of paraæsthesiæ, in my limited experience of them, more often than of pain; but that dentists are not sufficiently warned against them is suggested by the fact that I have found such people to have been completely denuded of teeth before they were referred to the psychiatrist. In some of these hypochondriacal cases I am bound to admit that I have not been able to demonstrate a satisfactory or even a probable psychological basis, but from their frequent occurrence in the involutional era of life, *i.e.*, 50 to 60, I suspect that they often belong to the type of illness which we call involutional melancholia or at least depression, which is the outcome of fundamental predisposition rather than of environmental stress or acquired "complex" factors.

For example, a man of 54 was referred from the Dental Department complaining of a twitching sensation in his face and the back of the neck of five months' duration. The only other symptom was insomnia, which of course he attributed to the paraæsthesiæ. He admitted no source of unhappiness of any kind. Although he had been out of employment for two years he denied any concern about this, but his age, the insomnia, and the prolonged paraæsthesiæ without physical basis suggested a constitutional depression.

Another case, of a woman aged 40, illustrated clearly the occurrence of a depression of this kind, in which the presenting symptom was pain in the gums. As she dated these from the stopping and ultimate extraction of teeth, she had visited the Dental Department first. But, in addition, her insomnia was very pronounced. She woke at 2 a.m. with the pain and stayed awake. In addition, she presented another sign of a severe depression in that she felt much slower in everything she did. In this case the evidence for a diagnosis of a constitutional type was strengthened by the family history of a father subject to what were described as "nerve storms" and of an uncle who had been in a mental hospital. She was also of the usual temperament associated with this type of illness—worrying always—and she had cause of a financial kind.

It is common enough to hear of teeth being

† Mrs. Lindsay, at the close of this lecture, kindly gave me a copy of her paper, "The Sun, the Tooth-drawer and the Saint," in which the following significant passage occurs: "In the Mahe' Wanso', the ancient historical writings of Ceylon, 2,500 years old, there is the story of Chanakko, who was a forerunner of Pasteur. When a youth, he found his mother weeping, and, on asking her the cause, discovered that it was because he would rule over everyone and forget his mother, and he asks on what part of his body this power is indicated. She replies in surprise, 'My dear, on thy teeth.' At once he smashed his teeth and became Kandadattho, the tooth-broken man, and was for ever afterwards celebrated for his devotion to his mother, so much so that he used her in his experiments in immunity to poisons." Clinically, devotion of a son to his mother and his failure to marry is often accompanied by (unconscious) phantasies of castration.

Mr. Came told me of a patient of his who, after a canine tooth had been extracted, informed him that he had become nearly impotent.

treated in the hope of curing or alleviating a condition of this kind. Sometimes, indeed not infrequently, removal of teeth is the last straw which precipitates such an illness. So much has been heard in the past of the favourable effects of the removal of teeth for mental conditions that it is perhaps as well to remember that sometimes the relationship is of a less desirable kind. At this point it is perhaps appropriate to mention that in the case of depressed people who are already miserable enough, to deprive them of their teeth without good cause is to add insult to injury. Moreover, they are in the worst possible condition to receive new teeth. Any discomfort with the plate is magnified many times, and I have known such people have as many as twelve or thirteen plates constructed, *e.g.*, a male patient of mine, who was aged 28 at the time, had all his teeth removed for pyorrhœa. For almost a month previously he had been getting a repeated spasm of the lower jaw similar to the chattering produced by cold. Evidently the discovery of pyorrhœa had led to the rather optimistic conclusion that this might account for the tremor. But what the dentist was not told was that for some months previously he had been having an obsession that he had swallowed harmful objects, such as pins, buttons, etc. If the object were near him he would at once fear that he had swallowed it. He had known that his fears were absurd, but, as is the way with obsessional fears,, they could not be shaken off. This particular man transferred part of his obsessional fear after the extraction to his teeth, and thirteen successive dentures made him feel " pent up as if he could explode."

Actually his statements were very interesting in the light of certain psycho-analytic views about the " introjection " or taking into oneself, as in swallowing of good and bad objects. This is said to be a frequent phantasy of childhood, and is analogous with the superstitious magic of primitive peoples, who believe that by swallowing something they incorporate its properties.

" The cannibalism of primitive races derives its more sublime motivation in a similar manner. By absorbing parts of the body of a person through the act of eating, we also come to possess the properties which belonged to that person. From this there follow precautions and restrictions as to diet under special circumstances. Thus a pregnant woman will avoid eating the meat of certain animals because their undesirable properties, for example, cowardice, might thus be transferred to the child she is nourishing. It makes no difference to the magic influence whether the connection is already abolished or whether it had consisted of only one very important contact."—(Freud, " Totem and Taboo," London, 1937.)

Clearly a bad object, if swallowed, might be one that might explode afterwards. The emergence of such fears is thought to mean the reappearance in a disguised form of thoughts and feelings surviving in the unconscious memory from early childhood, when the child's world was peopled with good and bad, friendly and hostile, things just as it is to primitive man. One of primitive man's ways of meeting the world, as of retaliating upon it, was with his mouth and teeth. Incidentally, I have seen similar paraæsthesiæ on the basis apparently of organic brain disease—in one case of chronic epidemic encephalitis, and in general paralysis of the insane.

An example of the focusing of anxiety on the mouth which has its origin in a very different situation was furnished by a young man who was referred from the Dental Department at Guy's Hospital because he complained of a general feeling that his " mouth and teeth did not fit." This complaint had existed for two years, ever since a blow on the mouth with a cricket ball had directed his attention to that region. But the event had coincided with the beginning of his career as a schoolmaster. He loathed schoolmastering, yet was unable to see any prospect of escape from the career he had slipped into, rather than chosen. His dissatisfaction created a general mental uneasiness, which promptly focussed on this injury, as such uneasiness or anxiety is apt to do on any part of the bodily or mental function to which attention has been accidentally called.

DENTAL INFECTION AND MENTAL DISEASE

The relationship between dental and mental disease is one that has been very hotly debated. The only kinds of mental disease which have a specific relation to dental infection are what are called the toxic psychoses which are characterised by failure in the intellectual field for the time being, *i.e.*, by failure in orientation and in perception generally—a state which is commonly called confusion, and which is very often accompanied by hallucinations and sometimes by delusions and alterations in mood. You will find that the majority of well-recorded cases of recoveries from mental illness following dental extraction belong to this group. This is not to say, however, that dental extraction is not indicated sometimes in other forms of mental illness, *e.g.*, depression, but there is a very considerable proportion of illness of the depressive type which recover spontaneously anyhow, and all sorts of treatments have from time to time been given

credit for curing the condition because the application of a particular method has happened to coincide with the time of spontaneous recovery ordained by Nature. Those who are enthusiastic advocates of focal sepsis as the cause of all sorts of mental diseases will record only their positive cases, and forget to record those cases in which removal of the teeth or tonsils or what not is not followed by recovery. Nevertheless I believe that there is scope for diagnosis of cases of the ultimately toxic psychotic type before they have reached the stage of an actual alienation.

The issue is a faily simple one: anyone who has a mental illness should have his general health improved if possible, and infected teeth should be dealt with in the best manner on the principle of leaving no stone unturned and on the additional principle that mind and body are two aspects of the same organism, but without optimistic promises of effect on the mental condition.

I do, however, meet a considerable number of instances where teeth appear to have been removed rather needlessly, and as far as I can ascertain it is usually the doctor who orders that all the patient's teeth should be removed, on sometimes inadequate grounds, and sometimes with rather unfortunate results. It does not help a still quite young woman who is depressed because of her disappointment in love to be deprived of her teeth and encumbered with a complete set of artificial ones, however well constructed. She is not apt to think that they increase her chances of a changed situation in life.

There has been, as you know, a fashion in medicine for focal sepsis, and while the conception is a valuable one, like all good things it can be overdone. There is little evidence that focal sepsis has much or any connection with mental conditions, especially with what are usually called the psychoneurotic conditions. For example, I saw a man aged 42 who was complaining of depression, insomnia, loss of sexual desire, constipation, etc. He saw a surgeon who suggested that his appendix should come out, whereupon he lost his pain in the back but got it elsewhere instead. He noticed that his breathing was getting slow and he seemed more worried. He complained of distension. His teeth came out next. They were all removed, but his symptoms continued as before. Actually the reason for his worry was that his financial situation had got steadily worse. He had had only two weeks' holiday in sixteen years, and he had a feeling of distinct resentment against a business associate whom he considered had let him down. He felt that he could never forgive him, and his resentment was simmering underneath the surface. Coupled with his financial anxiety, this state of mind accounted to a large extent for his depression.

There are many instances of this kind. The rule, I think, should be to deal with any teeth which are infected, but not to promise any special results in instances of this kind, which are vastly more frequent than the toxic psychoses I have mentioned.

This Medicine

THERE are many ways of arranging the theatre, but a convenient way is to have the anæsthetist at the patient's head, the surgeon on one side of the patient . . . etc." —(Love. *Minor Surgery*.)

Perpetual quarrels at meals, so common among ill-assorted couples, are particularly detrimental to the digestion.—(Conybeare. *Textbook of Medicine*.)

Stasis in the proximal part of the colon may be benefited by massage applied directly to the affected part.—(Price. *The Practice of Medicine*.)

The water should be raised by a pump through a pipe opening below water level.—(*A Textbook of Hygiene*.)

This week's prize of 5*s*. has been awarded to D. H. Carter, Guy's Hospital, for submitting the first solution. This competition has great possibilities, but our readers must send us more entries. Quotations or " things said " should be written on the back of a postcard with full details of the source and the sender's name and address. Postcards should be headed " Competition " and should arrive in the *Gazette* Office on the Monday morning before publication.

Sector News

Guy's Letter

AS the weeks pass by, we are slowly but surely getting "back to normal." Once again the clusters of students are seen awaiting the Honorary, not in the Colonnade, for it has been too cold, but in the comparative shelter of the landings of the Medical Block. Inside the wards on most afternoons two or sometime three rounds are in progress, the Senior Students flitting silently from group to group, eager to hear whatever is being discussed. We were somewhat dismayed to hear that our weekly evacuation to the bases could not be carried out during the cold spell. The wards have tended to become a little "blocked," and we have found it difficult to take in even the few cases of former weeks. We feel slightly guilty as we see the ambulance departing each week, bearing away the cases we have seen through the acute phase of their illness, or who have had their operation and will be in plaster for another month. To our colleagues at the periphery we extend not only our sympathy, but the hope that they will consider each "convalescent" case thus evacuated as a potential empty bed for some deserving soul from these crowded parts. In spite of these noble thoughts, we must admit we are glad to be at Guy's.

On a fateful Thursday recently, many well-known figures returned to the Hospital to attend a meeting, as is their wont from time to time. On the next day appeared the result of their decisions. There were some surprises. Some house officers found their period of office terminated the day before they received the news. It was indeed hard to have to say good-bye to Peter Birks and to Tony Hughes. We welcome amongst us B. Leibel, G. Channing, C. Halamandres and W. Maile. We are glad to see that a fair number of newly qualified Guy's men are now given appointments in the Sector.

With reference to the streptococcus and/or the influenza virus, we regret to report that the last take-in to the Eye Ward was none other than Dr. Bishop himself. We are glad to say he is making a speedy recovery.

H. F. L.

Orpington Letter

AT last we have become quite a hive of industry. That fiend of a thousand guises, that good friend of the diagnostician and soul-destroyer of the general practitioner, the "'flu," has been stalking through the camps of our local soldiery (German papers please don't copy), who now occupy the beds it should be their duty to keep empty. So numerous they have been that, having filled all our male beds, a ward on the female side has had to be opened for their use under the disapproving eyes of the more orthodox members of the community, until the new block can be opened.

It was with great pleasure that we heard that the new quarters for the medical staff, which we were told at the beginning of November would be ready in three weeks, are to be finished in under a month. It seems that most satisfactory progress is being made.

Towards the end of January Sister Marriott organised a dance for the Guy's staff here. The result was never in doubt, and, with a band which had already proved itself here on Boxing Day, the evening was a complete success. We were very pleased to welcome several officers and men from a neighbouring regiment, and the partners of the one in the gum boots had our deepest sympathy.

It was with much regret that we sat round a table in the "Maxwell" the other day to drink a last pint with Reeve and wish him farewell. He was the only remaining house officer to remember the P.A.I. as it was in the beginning, and we have felt his loss deeply. In his place we welcome Johnson, who is also to be our dentist. His prowess with the dart has quickly won him a place in the community. After fleeting visits from James Brown and Harley, we have much pleasure in welcoming Zorenson, our new Resident Surgeon. We hope he will not be compelled to hide his light under the bushel of inactivity. Lastly we wish to extend our contratulations to Davies and Sister Parks on their engagement.

Our Competition.—We mentioned about a month ago, the sad story of our X-ray plant, which, for the matter of a rubber band and a couple of drawing pins (or something of the sort) has now lain idle for three months. Further letters have been written and received, further officials have arrived, argued, grown angry, and gone away again, and still our gastrics queue up for tardy ambulances to carry them over the snow and ice of the inhospitable countryside to put down their pint at Farnborough.

Naturally, there has been much speculation as to the incidental expense which has been involved in bringing about an alteration costing, we learn, about £15. We hope, when this has at length been completed, to publish a detailed account of

its final cost, direct and indirect, to the unfortunate taxpayer. In the meanwhile, we thought it might be amusing to speculate on the figure we are likely to find. We therefore invite suggestions, to be sent in triplicate to the secretary of our X-ray Improvements Committee. The sender of the most nearly correct figure will, subject to the permission of the Ministry of Health, the Group Officer, the Medical Superintendent, our Radiologist, and Sister X-ray, be awarded a barium enema; and we hope to persuade some very high official to give the prize in person.

G. L. L. R.

Pembury Letter

PRIOR to the outbreak of war the Allies agreed upon a unified command, and nobody doubts the soundness of the decision. Unfortunately, the E.M.S. did not follow suit, and so we intend to air our opinion. We know that our grievances are not purely local ones, for we have observed similar grievances in the letters of our contemporaries. Our contribution, therefore, will be an attempt to crystallise the ills of the situation, and, though we must put our views as relating to Pembury, we believe they are much wider in their application.

The governing authorities concerned are the E.M.S. and the Kent County Council. The former look upon us as a hospital and the latter as an infirmary, and there is a fundamental difference between the two. The only way in which we could fulfil both duties would be a complete separation of the beds for each purpose. Has this been done? Certainly not; in fact, things are even worse, because there is a distinct difference between our true and reputed number of available beds.

We understand that some time ago an official was sent to determine the number of beds the hospital could accommodate in an emergency. We believe he must have worked on the principle of determining the cubic capacity of a ward and dividing by a given factor. Thus a ward twelve feet high should contain twice as many beds as one six feet high, even though they both have the same floor space. That may be a slight exaggeration, but the fact remains that we have got those extra beds stacked in corners, and the only thing we lack is a place in which to set them up, no efficient "sky hooks" having as yet been invented.

Now let us go back to our original point. In the opinion of the K.C.C. we are an infirmary and therefore cannot refuse any case (however unsuitable) until every bed is full, and as the K.C.C. accept the theoretical number of beds as our complement, we never can be full unless we sleep two patients in each bed. The result is that each day we get more and more "chronics," quite unsuitable for hospital treatment. We tried for some time to maintain a separation of cases, but in the end numbers overwhelmed us, and now we have an unholy mixture of "influenzas" and maniacal "seniles," cheek by jowl with clean surgical cases! Our Superintendent, Dr. Grasby, has struggled manfully with the problem, and his office has been besieged with outraged officials, Ward Sisters, House Officers, and probably many others. Our sympathy certainly goes out to him at the present time.

Any attempt at discharging a "chronic" who has come in for no other reason than *anno domini* or winter warmth is quite hopeless. A tyro attempting this procedure will find that the patient goes straight from hospital to the Relieving Officer, complaining of some theoretical ache, pain or disease, and that officer must needs send him back to us with an admission order, which we cannot refuse. We do not know the record for the round trip, but it must be under twelve hours.

In our view, therefore, some reorganisation is called for, and with complete humility we suggest the following:—

1. There should be *one* supreme controlling authority, in practice as well as in theory.

2. A definite limited number of beds should be set aside for infirmary cases, and the others should be kept strictly for hospital purposes.

These we believe are the fundamental changes required. We believe they are attainable, and we believe they are urgently required.

During the past fortnight we were asked to examine a sick nurse, quartered in the Workhouse. Escorted by Sister Caton, we made our way up a stone staircase and came upon the place where the nurses are herded in conditions unbelievable. The so-called dormitories are, in effect, spaces under a roof with bare wooden beams showing. The delicate garments of these ladies were hanging from rude nails driven into odd beams. Such conditions for nurses are appalling, and we call on the authorities to do something about them. We know that accommodation is being made for them, but it won't be ready for some time. In the interim surely these unfortunate people could be billeted in houses in Pembury. We know something of housing negroes in compounds on the mines of Johannesburg, and they do not compare unfavourably with the eye-sore we have attempted to describe. Charles Dickens, we need you again!

In these trying days, what is it that man seeks

more avidly than gold or diamonds or all the riches of the East? Why, a battery for his "pentorch." Well, we have found a supply at last, but we are not disclosing its whereabouts. That is an official secret!

N. M. J.

Farnborough Letter

THOUGH the weather and its general unpleasantness has been the chief topic of conversation here for many days, we will not harrow our readers by descriptions of its true horror. Suffice it to say that even such great ones as Drs. Mutch and Navasquez have had their redoubtable spirits quenched by ice-bound billets, whilst transport difficulties caused the bar to run dry on two occasions.

The outstanding news is the complete reorganisation of the nursing staff. At first both Guy's and Farnborough nurses staffed each ward between them, but, as time went on, it became increasingly obvious that the two systems of training could not be satisfactorily amalgamated. Now that the change has come, there is a complete division—wards with Farnborough Sisters and nurses and wards with Guy's Sisters and nurses so arranged that each staff has an equal share in the medical and surgical beds.

Comings and goings there have been in plenty. Teaching has been greatly reinforced by the arrival of Messrs. Spalding and Donald Leeming. Mr. Cole has left us for Nuffield House, his place being taken by Mr. Wakeham. Mr. Rowlandson has been transferred to Pembury, whilst John Leeming has departed for the Navy.

Finance still remains a problem for the house surgeons and house physicians. They have not been paid since November, and, were a pop-shop erected in Locks Bottom, it would do a roaring trade. Mercifully the English are a patient race.

W. W. G.

Nursing News

THROUGH the pages of the *Gazette* may we wish Miss Cawthorne every success in her new post as Matron of the Central London Ear, Nose and Throat Hospital, Gray's Inn Road, W.C.1.

Miss Cawthorne, best known as Sister May, has filled many posts during her twenty years of service. Many will remember her as Sister Mary and as Home Sister, but those of us who are still at Guy's remember her best installed in Matron's Office, as Second Assistant Matron, and finally as First Assistant Matron.

Twenty years is a long time, and she had become one of the personalities of Guy's, which are never quite replaced. She is a great loss to us, and may she find much happiness in her new work.

Miss Clare Bell has been appointed to the post of First Assistant Matron and Miss Marjorie Marriott to that of Second Assistant Matron.

We offer them both our congratulations and welcome them in their new capacities.

There is an important advancement in the administration of Farnborough Hospital: a Matron has been appointed to whom both the existing Matron and Sister Bell (who is in charge of the Guy's Unit) are responsible.

Miss Iles was trained at St. Bartholomew's and understands consequently the intricacies of a training school for nurses.

She has spent a short while at Guy's, prior to taking up her appointment at Farnborough. Let us hope that harmony will now be established where discord has been so rampant.

M. E. F.

Correspondence

The Take-In System

To the Editor of the GAZETTE

SIR,—As a student of the *Gazette* for the last twenty-five years, I have been struck more than once in recent times by its editorial air of complacency concerning the perfection of Guy's and its ability to set things right for others. Now "Passim" for January 27th has reached such heights of self-satisfaction that I feel impelled to raise my voice in mild protest. Please do not misunderstand me. I am very well qualified to speak of the magnificent spirit of kindness, gentleness and skill which still pervades the dear old place, having in recent years been back there as an in-patient for a considerable period, under most poignant circumstances.

Nor am I concerned with the deficiencies of E.M.S. and their cure. But, Sir, I have been very privileged during the last twenty years to come in close contact, as a general practitioner, with at least half a dozen hospitals, both Voluntary and State, in London, and there found the same spirit of genuine service, without that clogging feudalism which many persons, both in the

profession and among the public, find so trying in the old teaching hospitals by reason of its lack of imagination. I can give several instances in which Guy's falls short of the spirit which will "Win the War" in its widest sense, but I will content myself with a single example. The teaching hospitals year by year are losing more and more valuable acute material to the State hospitals by reason of the survival of the archaic system of admission by courtesy of a Take-In H.S. or H.P., whose regret that he has no bed, coming after a long and weary wait, often means that the wards which he personally controls are pretty full; or that he is not interested; or that he merely doubts the general practitioner's powers of diagnosis. Contrast this with the up-to-date system of State hospitals, where one is put through promptly to an office, which takes full particulars, repeats the address carefully, and then tells you what time the ambulance may be expected to arrive at the patient's house.

The present emergency has altered the number of beds, but not the methods.

Yours, etc.,

F. G. LLOYD.

149, Ashley Gardens,
Westminster, S.W.1.

The Coroner and Inquests

To the Editor of the GAZETTE

SIR,—May I place before your readers a grievance which the Residents have recently had to bear?

It has been the custom of late for the House Officers to deal themselves with Inquests and B.I.D. cases—this has enabled them to have the very necessary experience of writing a post-mortem report and of attending Court in an official capacity. No one will query the fact that this is an essential part of one's education, and how much better it is for one to have the experience whilst a House Officer rather than to attend Court for the first time as a general practitioner. It is true that at other London hospitals the House Officers are unable to obtain this valuable experience, but Guy's men are well trained by two expert medico-legal advisers, and they should be able to stand up to any cross-examination.

Since Dr. Cowburn resigned and his successor has been appointed it is evident that, unless something is done, the House Officers will no longer be able to take any part in these cases, as a Home Office Pathologist has apparently been instructed to deal with them.

Would it not be possible for some arrangement to be made between the Coroner and the House Officer concerned which would enable the latter to take his former part in these proceedings?

Yours, etc.,

F. J. R. STONEHAM,
Pres. Res.

Guy's Hospital,
S.E.1.

Doctors of the Future

To the Editor of the GAZETTE

SIR,—War aims and peace plans are the fashion. A glance at the current medical weeklies and student mouthpieces makes one believe that the profession of Medicine has had a vision of its future role. We are assured that all that is despicable in present-day practice will disappear, and also some that is good.

Rightly or wrongly, it is claimed for us students that, as the next generation of doctors, we should have some part in the planning for the future. Our representatives, however, are often little more than self-appointed enthusiasts.

In itself, all this may be commended. We are not here concerned with the way in which reform is carried out, but it is certain that, even in a monstrous State sausage-machine of health, no amount of officialdom and clerical organisation can prevent the medical adviser and his patient from coming into personal contact.

We claim that, both in the past and to-day, the doctor, whatever his other attainments, was and is characterised by his unfailing courtesy and good manners before his patients. In a word, he is a gentleman.

Will this be true of the future?

This question is brought to mind daily on rounds and at Out-patients. The poorest observer cannot fail to see that there does exist a small minority of students whose lack of good taste is manifested by their conduct in dealing with patients. No one is more critical of these shortcomings than he who hails from the Borough. To be examined by every member of an overcrowded firm, without so much as a "By your leave" or a "Thank you" is to be treated as clinical material in the worst sense of the word. The condition of some of the hands which practise palpation here would be better fitted for prodding cattle in market towns. And more—would we not all be more comfortable without that everlasting pushing and elbowing?

A proportion of the biggest offenders are some of those who most loudly protest that no one class of the population should play the part of illustrative cases for teaching purposes.

Courses in demeanour and deportment have, as yet, no place in the medical curriculum; proficiency is assumed.

Many things change in wartime. But let us hold on to a manner or two.

Yours, etc.,

" POIKILOCYTE."

Guy's Hospital,
S.E.1.

The Ministry and Medical Students

To the Editor of the GAZETTE

SIR,—The following questions were sent to the Minister of Health in December :—

1. (*a*) That a definition be given of the present status of students including their status in the case of air raids.

(*b*) That a definition be given of the future status of students.

2. That notice of at least one month be given of any change in the regulations.

3. What arrangements were made for students who were forced to discontinue their studies owing to financial difficulties due to the war.

4. If the Ministry were in favour of maintaining the standard of medical education and examinations at the present pre-war level.

The Minister replied to these on January 3rd as follows :—

Ministry of Health,
Whitehall, S.W.1.

My dear Brooke,

You handed me a week or two ago the enclosed memorandum by the National Union of Students. I should say straightaway that I am not officially responsible for the facilities for continuing medical education in war time, although I am naturally interested by reason of my general concern for the public health and have endeavoured, in drawing up the emergency hospital scheme, to avoid undue interference with medical studies.

The arrangements for students were considered some time before the war by a Committee of Vice-Chancellors of the Universities, and it was decided, in consultation with Sir John Anderson, that there would probably have to be a " moratorium " in systematic teaching of clinical medical students during the first three months of war. During this period they were to be distributed amongst suitable hospitals in the Sectors under plans drawn up by the Group Officer, who is in most cases Dean of their Medical School and can therefore be relied upon to safeguard their interests as much as possible.

These are the plans that have been put into operation. Admittedly there has been some dislocation in the course of study, but I think the best use has been made of the clinical material available. In the first few weeks of the war the students gave very useful assistance in preparing the emergency hospitals for use, in acting as stretcher-bearers, and in other ways. In recognition of this, the Ministry has defrayed the cost of their board and lodging at the outer hospitals. There is no intention, however, of continuing an arrangement which tends to divert students from what should be their main task of qualifying in their profession. As announced recently in the Press, I am taking steps to facilitate the re-opening of more beds in the teaching hospitals in London, and some 400 consultants serving as whole-time members of the Emergency Medical Service have taken advantage of an offer which enables them to resume work at their own hospitals. This will in turn enable the students to be redistributed in such a way as to make more clinical material available to them and generally to improve the facilities for their education.

This change will, I expect, be brought about in the course of this month.

If in consequence of intensive air attack the amount of clinical work should exceed the capacity of the qualified doctors available, it would no doubt be necessary to rely on the assistance of the senior students. In such a contingency the students concerned might have to be moved immediately or at very short notice.

I think that this provides an answer to the first two questions put by the meeting of students.

The answer to questions 3 and 4 is that I have no power to give any directions as to medical education or examinations, these being matters for the teaching and examining bodies, and that I have equally no power to give financial assistance to medical or other students adversely affected by the war. They should, if necessary, consult the Dean of their Medical School on this.

Kindest regards,

Yours very sincerely,

(*Signed*) WALTER ELLIOT.

Since our first letter was written before the changes which occurred on January 1st, a further letter is now being sent to the Minister with the hope of finding out more about the plans for students should air raids occur.

Yours, etc.,

H. BROOKE, M.P.

National Union of Students.

Reviews

Physical Signs in Clinical Surgery. By HAMILTON BAILEY. Published by Wright. Seventh Ed. Pp. 310. *Price* 21*s*.

THE arrival of a further edition of this admirable book is chiefly justified by the opportunity this affords for its reintroduction to the surgical ward clerks and dressers.

Intended mainly for students entering the clinical period, the virtue of this book lies in the importance it stresses upon the application of method in the elicitation of signs. The underlying motive of the book is the practical expression of the theory that it enunciates: to some extent, this fundamental is overshadowed by the excellence of the photographs and the clarity of the descriptions. The part played by physical signs in surgical diagnosis is a very important one, and, just as the relative value of different signs can only be determined by experience, so also the weight to be attached to even the simplest sign must depend upon the confidence with which this is elicited; this confidence can only be acquired if every possible opportunity for practical application has been fully utilised. Every student should digest this book whilst at work in ward and Out-patients, but it should be his aim to have left it behind him as he approaches his Final examinations.

Inevitably, the multiplicity of the signs described detracts to some extent from their individual value; even revisions have, however, left little in the text that could be termed redundant. Loewe's eye test might well be omitted, however accurate or inaccurate it be, for the diagnosis of acute pancreatitis will always depend more upon clinical acumen than upon physical signs. It is unfortunate also that the controversial relation of chronic mastitis to carcinoma of the breast should be categorically assumed, in such close proximity to the differential diagnosis of these two conditions as to cloud in the junior student's eyes the imperative necessity for distinguishing these two conditions.

Many examinees would, however, do well to bear in mind the succinct remarks upon the value of X-ray in the diagnosis of acute osteomyelitis of bone. The last chapter of the book, although so true to life in its expression of the surgeon's attitude towards medical problems, is surely an insult to the average student's intelligence, and would far better be omitted than left so brief.

In text and illustrations, this edition shows many minor improvements upon the last: the introduction of footnotes, briefly detailing the originators of the signs we learn, is a useful innovation; it will not only obviate many an awkward pause on the "round," but also will greatly facilitate the task of those who genuinely take interest in the man, whom we have hitherto revered in name alone.

This is one of the author's better books, and is definitely to be recommended.

N. A. N.

Minor Surgery. By R. J. MCNEILL LOVE, M.S., F.R.C.S. Pp. viii+370, Illustrations 155. *Price* 12*s*. 6*d*.

THIS little book is yet another addition to the well-established stock of books on Minor Surgery. Well bound and printed and easy to read, it most certainly maintains, and in some respects surpasses many of the others. There are one or two items which always seem to be copied from book to book, such as the quite unnecessary space given over to washing of the hands and arrangement of the operating theatre.

Apart from such lapses, however, the book is good. It seems a pity that in the section on fractures there should be so little on the general principles of fracture diagnosis and treatment. All the smaller books seem to neglect this most important aspect of fractures; a small volume would be the ideal place for a good chapter on fracture treatment in general and the treatment of sprains and dislocations. It is not possible to cram the treatment of individual fractures into such a small space without missing out much that is important. What is dealt with in this direction is certainly as much as could be got into the space. It is good at last to see a correct diagram and explanation of the rectum and anal canal.

It might appear that more has been criticised than praised; this would most certainly be unjust, as all the sections of the rest of this book are excellent—especially is this so in the chapter in anæsthesia. It is a neat, handy and readable volume.

D. H. F. C.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Sport

Rugby

Guy's v. Catford Bridge

(*At Honor Oak Park on Saturday, 2nd December*)

GUY'S, securing more of the ball from the scrums overran Catford Bridge at Honor Oak Park, beating them by five placed goals, two penalty goals, and four tries (43) to a goal and two penalty goals (11).

Despite some fine tackling by Sparring and Piper for Catford, the Hospital were completely masters of the situation. In the loose, Albers, Osmond and Williams were prominent for Guy's, while Phillips (fly-half) making his first appearance, linked up splendidly with W. J. Lewis.

The best of Catford Bridge forwards in the loose were Murphy, Sutherland and Waters, but behind the scrum the threequarters seldom received a chance to show their ability.

Tries were scored for Guy's by Gartrell (3), Crawford (2), Phillips (2), Babrow and Renton; Mullins converted two, Phillips two, and Kynaston one, while Mullins and Phillips each landed a penalty goal. Longden scored a try for the Bridge which was converted by Waters who also kicked two penalty goals.

Team.—T. L. T. Lewis; J. P. Crawford, R. U. F. Kynaston, L. Babrow (Captain), P. C. Gartrell, J. Phillips, W. J. Lewis; M. R. Mullins, H. F. Osmond, J. P. Rochford, J. R. D. Williams, J. C. Balstrode, T. W. Renton, A. G. A. Albers, C. S. Darke.

Guy's v. Bedford

(*At Honor Oak Park on Saturday, December 9th*)

FOLLOWING two defeats, Guy's returned to form and beat a powerful side labelled "Bedford Lions" by a dropped goal and 2 tries (10 points) to a placed goal (5 points).

The Hospital owe their success to magnificent team work, and although Bedford put up a splendid fight, Guy's always had a bit in hand.

Bedford opened the scoring and led at half-time. Then they were only a point behind until about five minutes from the end. But a beautiful left-foot dropped goal kicked by the Guy's captain, L. Babrow, clinched the issue and so Guy's won.

It was not exactly a spectacular match—the heavy ground made that well-nigh impossible. Still, it was always interesting, and at times the football was very good indeed.

With the Guy's forwards, though out-weighted, getting the ball much more than their opponents, we saw quite a lot of the Guy's outside-half, J. Phillips. This young player showed great promise.

He handles the ball well, is nippy, and cuts through at a rare speed. In addition, he kicks nicely, so that altogether, with his captain, Babrow, behind him, the home side were strong in that part of the field, and I can imagine quite a lot of fireworks when these two work a really good understanding.

But these two were no better than the Guy's full-back, T. L. T. Lewis. He played a capital game, fielding that greasy ball cleanly, kicking it with much force and judgment, and going down pluckily to all the rushes that came along.

The big Bedford pack, containing such stalwarts as G. T. Dancer, L. Fox, G. O'B. Power, R. Willsher and H. J. Irens, were good, and if they could have got the ball as well they must have won the match for their side. Fox, the R.A.F. player, had some hard battles with H. F. Osmond, but the latter was in excellent form and secured the ball on most occasions.

The backs were not so good, except, perhaps, J. W. Pawle, a fine, upstanding centre, who always took a lot of stopping, and who scored his side's only try, which Irens converted. This was after about twenty minutes' play.

A delightful run up the middle of the field by the Guy's centre, R. U. F. Kynaston, led to his side's first try, though P. C. Gartrell actually scored it with a dash at the end. That was the position at half-time, 5—3 in Bedford's favour.

The other try came midway in the second half. After Phillips had started a pretty passing movement, the ball got loose. R. F. Camp picked it up and ran cleverly round the Bedford full-back before touching down.

Team.—T. L. T. Lewis; ~~D. W. F. Charlton~~ R. F. Camp, L. Babrow (captain), R. U. F. Kynaston, P. C. Gartrell; J. H. Phillips, J. W. Lewis; D. N. Fuller, H. F. Osmond, M. R. Mullins, J. C. Bulstrode, J. R. D. Williams, G. A. Alders, C. S. Darke, T. W. Renton.

Guy's v. Wasps

(*At Honor Oak Park on Saturday, December 16th*)

GUY'S achieved a notable performance at Honor Oak Park by smashing the Wasps' unbeaten record. Guy's won by 2 placed goals, 1 penalty goal and 1 try to 1 placed goal and 1 try.

Although Guy's forwards were superior in scrummaging and gave their backs many opportunities, the Wasps were tough opponents.

Guy's led at half-time by tries scored by Babrow, and Phillips (which were converted by Phillips and Mullins respectively), and appeared to be well on top, but after the interval the Wasps' pack, of whom Malcolm and McClaran were outstanding, came into their own.

If they were not the equal of the Guy's forwards in the set scrums, they were certainly better in the line-outs and in the loose.

Phillips, Gartrell and T. L. T. Lewis were conspicuous behind the Hospital scrum, the last named giving a fine display at full-back. Bowcott and Tarbart were the best of the Wasps' backs. In the second half Phillips registered another try for the Hospital, and Mullins kicked a penalty goal. Tarbart twice crossed for the Wasps, Clarry improving one.

Team.—T. L. T. Lewis; J. P. Crawford, J. Phillips, L. Babrow (captain), P. C. Gartrell; J. van A. Steytler, W. J. Lewis; M. R. Mullins, H. F. Osmond, J. B. Rochford, J. R. D. Williams, J. C. Bulstrode, D. N. Fuller, A. G. A. Albers, T. W. Renton.

SAILING CLUB, 1940

THE Annual General Meeting of the United Hospitals' Sailing Club will be held at 6 p.m. on March 1st (Friday) in the Anatomy Theatre at Guy's. Mr. Ogilvie will be in the Chair.

Like many other things, the running of the U.H.S.C. will have to be radically altered this year, and it is only by the efforts of individual hospitals and individual members of the hospitals that dinghy sailing will prosper during war-time.

There seems little doubt that the U.H.S.C. will not be able to function as such down at Burnham until after the war, chiefly because of lack of income from the annual dance. This being so, it is hoped that the keener hospitals will be persuaded to fit their dinghies out themselves, and bring them up the Thames to Hammersmith.

As the meeting will be of great importance, not only to the Club as a whole, but to every active member, I hope all Guy's men interested in sailing will make a special effort to be present.

D. G. HORAN,
Hon. Sec., U.H.S.C.

Hospital Information, etc.

Notice

UNIVERSITY OF LONDON
SECOND EXAMINATION FOR MEDICAL DEGREES

Attention is drawn to the earlier date of the Examination in March, 1940. This Examination will begin on Wednesday, 6th March, and entries must be received by 8th February, 1940.

The entry fee for the Second Examination for Medical Degrees payable by students who have passed in Organic Chemistry at Part I under the old Regulations is nine guineas.

M.B., B.S. EXAMINATION

In and after September 1940, and until further notice, the M.B., B.S. Examination will be held in October and March (or April) instead of November and May. The Examination in October, 1940, will begin on *Monday, 14th October*, and the latest date for the receipt of entries is 31st August.

The date of the Examination in March or April, 1941, will be announced later. Entries must be received by 25th February.

Pass List

UNIVERSITY OF LONDON.
D.Sc.

G. Stead.

CONJOINT BOARD.
FINAL EXAMINATION.
January, 1940.

Medicine.

L. Babrow
*W. E. R. Budd
*G. H. D. Channing
*C. J. St. Cin
P. R. Cooper
*D. M. Douglas
*O. C. Fung
H. P. Guerrier
*P. Harvey
D. S. Hayton-Williams
*A. B. Lennie
*B. Levin
*W. B. D. Maile
*C. L. T. McClintock
D. H. Meldrum
*R. Moore
A. J. Patenall
*A. F. Rushforth
W. Sewell
*G. F. Smart
W. H. Spencer
*J. V. A. Steytler
*B. C. M. Reed
R. Tilley
*J. Wills
*F. L. D. Young

Surgery.

*R. H. Bhanji
G. H. G. Chase
*C. J. St. Cin
*R. B. Clayton
J. P. Crawford
*O. C. Fung
J. Gordon
*P. Greenstreet
*P. Harvey
*B. M. Heap
D. G. Horan
*B. S. Leibel
N. W. R. Lucas
*C. L. T. McClintock
*A. F. Rushforth
*G. F. Smart
E. A. Spouse
R. P. Strang
G. T. G. Thomas
*F. R. Turner
J. R. D. Williams

Midwifery.

B. Alhadeff
J. V. Braithwaite
J. E. Bulow
J. C. Bulstrode
D. I. Chapman
G. J. L. Davies
C. W. Peck
G. W. Pinder
G. C. Price
*K. O. Rawlings
D. B. Roberts
P. A. L. Roberts

A. M. Dawes
P. C. Dismorr
M. L. H. Evans
D. N. Fuller
D. M. Jackson
B. D. L. Johnson
T. S. Leedham
R. Leigh
R. P. Mills
*R. Moore
G. H. Pearson
W. Sewell
*G. F. Smart
T. H. S. Smith
W. H. Spencer
A. B. Stratton
H. A. Thomas
R. Tilley
R. Wadia
*J. A. E. Watts
H. W. Wheate

* Have now completed the Examination.

SOCIETY OF APOTHECARIES OF LONDON.
FINAL EXAMINATION.

Surgery.

G. E. H. Enderby
*J. N. Hunt
*N. W. R. Lucas
*H. Wormald

Medicine.

C. Bucknall
*N. W. R. Lucas
*A. M. McCall
*H. Wormald

Forensic Medicine.

C. Bucknall
*N. W. R. Lucas
*A. M. McCall
*H. Wormald

Midwifery.

G. T. Hammond
H. Wormald

* Have completed the Examination.

ROYAL COLLEGE OF SURGEONS.
L.D.S.
FINAL EXAMINATION.
November, 1939.

PART I.

Surgery.

H. H. Brown
M. K. Burt
K. B. Lole
W. G. Cross
R. R. Darracott
D. K. L. Davies
D. P. Finnegan
P. Fletcher
J. H. Flitcroft
R. C. Green
F. A. Gresham
H. A. Hall
W. J. Head
E. A. G. Hilton
W. E. Jackson
P. D. Jones
J. W. Lee
R. E. Matthews
R. C. D. Morrell
L. Pohl
G. E. A. Ralston
F. F. Robson
S. N. Simpson
R. G. M. Stobie
R. B. D. Stocker
A. Stone
B. P. Taylor
E. A.St. H. Tweeney
A. T. Vale
A. Walton

PART II.

Dental Surgery.

J. L. Badgett
F. Butterfield
R. J. H. Corfe
W. G. Cross
D. M. Cushing
A. S. Davie
J. O. Enos
D. P. Finnegan
P. Fletcher
J. B. Gayes
W. F. Gibb
H. A. Hall
J. G. Hancock
J. W. S. Harvey
W. J. Head
S. Holt
R. G. James
R. C. Jones
P. D'O. Kolesar
J. W. Lee
F. T. J. Limpenny
K. B. Lole
S. G. McCallen
E. J. Martin
L. G. Morey
R. D. Plowman
L. Pohl
A. M. Pollard
J. C. Ritchie
J. H. Sarginson
E. S. Smith
F. N. Stares
A. Stone
J. H. Thomson
K. R. Titford
A. H. G. Trayanion
E. A. St. H. Tweney
A. T. Vale
A. Walton
H. A. Woodward

ROYAL COLLEGE OF SURGEONS.
L.D.S.
FIRST PROFESSIONAL EXAMINATION.
October, 1939.

Dental Mechanics and Dental Metallurgy.

J. A. Boyd
J. S. Breen-Turner
J. D. Buxton
A. E. Cadman
R. F. Camp
P. Cohen
D. R. Corless
A. S. Davie
A. A. Dyas
J. H. Forrester
P. C. Gartrell
D. Gill
R. M. Gillies
A. P. Gimson
T. J. Hancock
E. Harvey
D. R. Hone
P. Hopkins
A. V. Hurst
R. B. Illing
J. E. Jones
P. Jones
M. A. Kettle
J. O. Legg
M. G. Marks
D. A. T. Payne
H. H. S. Payne
P. F. Pearson
N. A. Punt
J. Rankin
W. L. Renouf
J. P. I. Rose
N. I. Scott
N. Stark
F. M. Wood

Anatomy and Physiology.

J. F. Baker
K. A. Barnett
S. E. Blockley
J. S. Breen-Turner
P. F. E. Brown
P. C. Gartrell
A. P. Gimson
G. S. Chase
H. Cohen
J. W. Drury
P. G. C. Farrant
G. G. T. Fletcher
G. C. Fuller
T. P. Grudgings
E. Harvey
A. J. Hayward
P. K. Holford
D. R. Hone
G. G. Jackson
E. S. Jerichower
P. Jones
M. A. Kettle
N. A. Lee
H. C. Miller
D. H. Norman
W. L. Oakes
F. J. Piercy
J. J. Platt
J. A. Powell
W. B. Sanders
L. H. Schuler
D. C. Steven
M. F. H. Stobie
R. A. S. Tipper
J. Whatley
D. E. Williams
F. M. Wood
T. W. H. Woodward

Special Anatomy and Physiology.

K. R. Glanville
J. O. Legg
N. M. Midgley
R. C. D. Morrell

Papers by Guy's Men

Buchan, George F. School meals: with special reference to planning of dietary and assessment of nutritional needs. *Public Health*, 1940, liii, 83.

Holling, H. E. Observations on the oxygen content of venous blood from the arm vein and on the oxygen consumption of resting human muscle. *Clin. Science*, 1939, iv, 103.

Bensted, H. J. Bacterium typhosum. *Jour. R.A.M.C.*, 1940, lxxiv, 19.

Maizels, M., and Another. Effects of storage on human erythrocytes. *Lancet*, 1940, i, 113.

Willis, James. The development of synovial joints (with plates). *J. Anat.*, 1940, lxxiv, 277.

Ryle, J. A. The future of clinical teaching. *Lancet*, 1940, i, 157.

Changes of Address

R. W. F. Brotherton, Army Dental Centre, 52, Northlands Road, Southampton.

EDS. { E.B.R. H.F.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

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PASSIM

WHEREAS argument is often tedious and unprofitable, discussion is stimulating. We thus welcome Professor Ryle's letter which we publish in this issue, and thank him for sparing the time to reply so fully to our scattered remarks concerning his article " The Future of Clinical Teaching." We would first seek humbly to defend our standpoint. We are, it appears, guilty of " misinterpreting certain of his statements and his views." While we read the article we were transported into that wonderful Utopia which Professor Ryle describes. But as we sat and thought, we realised we were next door to the Counting House, beneath the Court Room, near the Appeal Office, in a building condemned as unsafe and awaiting destruction. Will the State aid us unconditionally amidst this fabric as we strive to teach and train our students ? We are not alone in our belief that State aid will beget State control, and thus will bring in its train inventories, inspectors, and bureaucracy.*

In our remarks about the whole-time teacher we again strove to look beyond the idealism of the written word. It has been our experience that such teachers tend to classify and present their subject as it will best suit the demands of the examiner. Perhaps our experience is too limited. We envy Professor Ryle's privileged clerks who work without a thought of examinations. For ourselves we must admit (though we do not feel any shame thereby) that in spite of our love for our subject, it is the proximity of examinations which stirs us to our greatest efforts.

Tradition need not bar the way of progress. At Guy's we are proud of the past, and of the many names now famous. Their memory still lives to encourage us to press forward, and to carry on the work which they began. We are grieved, therefore, about this compacency, which again we are told, runs through our writings. In word we have considered our tradition as a foundation on which we are building. We are failing indeed, if others outside these walls think that we are cherishing those traditions to the exclusion of reform. It is clear that we must do more than speak about our aspirations. We must be able to keep pace with the changes which are constantly occurring, and to demonstrate in practice that our tradition is not the " clogging feudalism " of a past age.

PERHAPS the best answer to the charge of complacency is to be found in the recent issues of the *Gazette*. This journal has always sought to be fully informed on current opinion and official action. Whereas it has appraised that which was good, it has not hesitated to criticise and press for reform when such was indicated. Remarks in this latter direction may need to be carefully veiled, or blended perhaps with humour; but they reach their mark, as personal interviews later demonstrate. Through our correspondence columns we invite our readers to express their views freely, whether or not they are in agreement with our own. We therefore welcome Professor Ryle's letter, although his mention of the laboratory facilities open to his firm strikes a bitter note to us at Guy's in our present hæmatological difficulties.

A RECENT decree informs us that each and every case offered by the Emergency Bed Service must be accepted up to the stated number of our empty beds, as published twice each day. Cases seen by us in the Front Surgery must in turn be offered by us to the E.B.S., who will dispose of them for us. The sole function of the Take-In H.S. and H.P., whether feudal or traditional in character,

*Lancet, Feb. 10th, p. 291.

has been thus arbitrarily abrogated from us, and assigned forthwith to the general practitioners.

Our correspondent will perhaps be pleased, but a survey of many cases thus admitted would convince the most critical that many practitioners are human and do err from time to time. We do not resent any change that is good, but we do feel that little if any advantage will accrue to our patients from this edict, and with the present limited number of beds, teaching rounds will soon become a mockery, and the Base Hospitals be strained to breaking point.

Obituary

W. A. MAGGS, L.R.C.P.(Lond.), M.R.C.S., L.D.S.(Eng.), L.S.A.

WILLIAM ADOLPHUS MAGGS was the second son of Mr. and Mrs. T. C. Maggs, of Yeovil. He was born in 1885 and was educated privately. He entered the Royal Dental Hospital as a student, and became a prizeman of the hospital, obtaining his L.D.S. (Eng.) in 1879. His medical course was followed at the Middlesex Hospital; here he was a fellow student with Sir John Bland Sutton, with whom he maintained a friendship throughout life. Maggs passed his L.S.A. in 1884, M.R.C.S. 1885, L.R.C.P. 1886. He joined Mr. Arnold Rogers in an old-established practice in Hanover Square. This was afterwards removed to Upper Wimpole Street. When the establishment of the Dental School was being considered in 1887-88, the original suggestion was that Mr. Newland Pedley should continue as Dental Surgeon to Guy's Hospital, having charge of the ward cases and general arrangements, while six assistant dental surgeons were to carry on the work of the Dental Department; of these six, one was to be appointed as deputy to Mr. Newland Pedley, and Maggs was selected for this very important post. He also became Lecturer in Dental Anatomy in the Dental School. In this capacity he carried on the great tradition in comparative dental anatomy and zoology created by Bell when he was Dental Surgeon to Guy's in the middle of the last century. Maggs especial contribution was a paper written in collaboration with the late J. Lewin Payne in 1901 upon the skull and dentition of an aberrant New Zealand lizard, Sphenodon, which presented primitive characteristics showing similarity to avian types.

Maggs became a dental surgeon to Guy's in 1890 and Senior Dental Surgeon on the retirement of Mr. Newland Pedley in 1906. On reaching the age limit he was appointed to the consulting staff in 1921. Maggs was a member of the Board of Examiners in Dental Surgery of the Royal College of Surgeons and to the R.A.M.C. He filled many offices in the profession, among them being President of the Metropolitan Branch of the British Dental Association and of the Odontological Section of the Royal Society of Medicine and a Trustee of the Odontological Museum at the Royal College of Surgeons. Some of Maggs's professional teaching is worth remembering still. When discussions regarding the treatment of patients was being carried on in the wards or the Dental Department he would take his house-surgeon or dresser by the arm and say, "Man, what would *you* have done if you were the patient?" This honesty and consideration for the patient first was characteristic of all his practice. He taught the importance of avoiding the incidence of dental disease by relieving the overcrowding of the mouth at an early age. He also advocated the drainage of infected tooth sockets with tampons of paraffin wax impregnated with iodoform so that the deep wounds healed up from the bottom. In these and in other respects his teaching showed a sound knowledge of clinical surgery and was in advance of his time. In technical dentistry he was an expert in the use of non-cohesive gold for fillings.

In person Maggs had a tall, military figure, with heavy drooping moustaches; he much resembled his friend and colleague, the great surgeon John Dunn. Maggs was fortunate in his family life; with his wife and son and daughter his home was a place of quiet and happiness. After a brilliant career at Oxford, his son was entered as a medical student at Guy's. When the Great War broke out he at once joined up, and in 1917 fell, fighting with the infantry at Arras. This, and the subsequent death of his wife, were blows of intense bitterness to Maggs, but he was sustained by his religion. A devout member of the Church of England, he was an honourable Christian gentleman of the best type. The writer was his house-surgeon in 1908, and in an intimate friendship extending over thirty years never found the slightest variation or shadow of turning in him; he was straight as an arrow and honest in all his dealings. *Vale atque vale.*

F. N. D.

Posture as a Therapeutic Measure

WITH SPECIAL REFERENCE TO OTITIS MEDIA

A Lecture delivered at Guy's Hospital on Monday, 22nd January, 1940, by T. B. Layton, Esq., D.S.O., M.S.

GENTLEMEN,—When modest young men write scientific papers they usually append a number of references to the works from which they have obtained what they call their knowledge. I am going to talk to you from experience, and the trouble is that when one talks from experience it always sounds as though one were blowing one's own trumpet. I want you to understand that it is not with that object that I am speaking, but in order that you may know that what I tell you has been proved, to the best of my present knowledge, by experience. Moreover, you can the more easily criticise such knowledge because, when you listen to a person relating his own experience, you should be able to judge whether he is lying, or bluffing, or is really giving you facts which he has himself observed.

I have been interested in the question of posture as a therapeutic measure ever since I became a house surgeon. At the end of 1906 Mr. (afterwards Sir Arbuthnot) Lane brought back from America three important advances in surgical therapeutics. One of these was the procedure of sitting patients upright in the manner known as Fowler's position. The idea of it is very simple, that any free fluid in the abdomen will track down into the pelvis, where absorption from the peritoneum is far less than it is from the upper part of the abdomen underneath the diaphragm and over the surface of the liver. I do not know whether that has ever been pathologically proved, however, and I should be very much obliged if someone here would look it up for me and give me the reference to any pathological work.

In addition, the assumption was that the bactericidal property of the peritoneum in the pelvis is far greater than in the upper part of the abdomen. If, therefore, infected fluid can be got down into the pelvis there is less chance of the poisoning which kills the patient in peritonitis and the greater chance of the localisation of a harmless abscess. Some people appear to think that patients are made to sit up in order to get localisation in the pelvis rather than between the diaphragm and the liver, because that is an easier position in which to open the abscess when it is localised. But I know that the original idea of Fowler's position was to get the infected fluid into the pelvis where it would not be absorbed by the peritoneum and where more micro-organisms would be killed.

There are, however, two other things which I believe are as important as the original idea which Fowler had in advising his position. One is that the lower part of the lungs is properly ventilated, and the other that the patient is very much more comfortable, and that comfort, by giving rest, assists in his recovery. Although we call it Fowler's position, Fowler was not the first person to discover the advantage of it. The Army medical officers in the South African war knew of it. If a man was hit in the belly they found that his best chance of recovery was to sit him up just where he was, place over him an improvised protection from the sun and weather, and leave him there. That was the teaching of the R.A.M.C. in the period before the Great War.

It is not possible to maintain a patient in the right position simply by placing a mass of pillows behind his back. The patient always slips down and comes to lie on the lower part of the chest, in which position he tends to get a kink in the most rigid part of the back, and the whole body has to be lifted up over and over again in order to get any air down into the lungs. Observing this one day, Mr. Lane pushed a pillow under the patient's knees and, by means of a couple of bandages tied to its corners, attached it to the head of the bed. He subsequently replaced that arrangement by a round pillow with cords which is still known as the " Lane pillow," although in in many hospitals it is called the " donkey." For a time that became the routine manner of treating patients after all abdominal operations. The Lane pillow or " donkey," however, fell into disrepute because of the large number of cases in which thrombosis occurred in the pelvis. It is easy to see how this might happen when one considers the position of the inferior vena cava and the iliac vessels, which makes it likely that stagnation will be brought about at one point. The many cases of thrombosis that occurred thus caused the Lane pillow to be anathema to-day in a large number of clinics.

But this, like so many other things, is an instance of bad thinking and also an example of the quite undue influence which abdominal surgery has had upon the teaching of medicine, particularly the teaching of surgery. It illustrates the exceptions rather than the rules. It is a tragedy that when students are supposed to be learning the general

principles of surgery they should come so largely under the influence of abdominal surgeons rather than of those more general surgeons who practice in diseases of the upper respiratory tract. It is the two factors of stagnation within the circulation and of flexion that lead to the thrombosis. If the method be used for cases in which the pelvic circulation has not been interfered with, and particularly if it be used for a shorter time than it takes for the healing of the abdominal and pelvic wounds in a stout elderly female patient, one will not get thrombosis as the result of the Lane pillow. I lay stress upon that, because in these cases of abdominal surgery "absolute" rest may not be needed; but, if it should be, there must be a pillow under the knees.

Well, that is what first made me interested in posture as a therapeutic measure. In the year 1912 I was appointed on the staff here, one of the conditions being that I should go abroad further to study the specialty. I went to Vienna, and in three months there I learned from Professor Hajek how to do rhinology under local anæsthesia. One of the operations of rhinology is that on the septum of the nose. It involves plugging the nose for a number of hours afterwards. Hajek used to plug it for forty-eight hours, and I have always followed his practice. Sometimes, however, the headache from which the patient suffers is so intense that the plug has to be taken out within twenty-four hours. But Hajek used to say that the patient must be upright for the whole of that forty-eight hours. That is a very difficult thing to carry out in the organisation of the ward of today, and the nearest I have been able to reach to it is to instruct the day nurse that the last thing she should do on going off duty is to put the patient to bed and the night nurse that the first thing she should do is to get the patient up in the morning. This gives an erect position from 7 a.m. to 9 p.m. At Guy's, however, we have the advantage of Nuffield House, where there is a "cardiac chair" in which, when it is not in use for other purposes, we are able to put our patient in exactly the position we want. I have had three or four cases who have been in the chair for the whole forty-eight hours and have slept comfortably in it. I have no doubt that Professor Hajek's teaching was correct and that there is far less headache if, when the nose is plugged, the patient is kept upright.

This can be carried a little further. Swelling of the frontal nasal duct will give a frontal headache, and a large number of people jump to the conclusion that the moment the patient indicates a pain in the forehead there is a fontal sinusitis. They think this is something the rhinologist can "cure," and that in curing it he will remove "sepsis" and so get well the condition for which the patient was originally sent. Frontal sinusitis, except in the acute invasive stage, is usually a painless disease. Any blocking of the frontal nasal duct gives a frontal headache, and if this frontal headache occurs, the first thing to make it better is to get the patient out of bed and to sit him up. If the nose can also be got to secrete, that headache will probably cease. But the position is the matter of chief importance.

One of the causes of the blocking of the frontal nasal duct is an inflammation of the nose, and one of the causes of inflammation of the nasal mucous membrane is influenza. Therefore in influenza frontal headaches are an extremely common symptom. I saw a man only two days ago who was actually screaming with pain and rolling about in bed. He was not the type of man who would be expected to make a fuss about a pain unless it was really severe. We sat him upright, and then I told the house surgeon to give him morphia. It is worth while remembering this because at the present time there is a considerable amount of influenza, and headache in it is an important symptom.

Hajek also taught me to do all local operations on the nose under local anæsthesia. I am speaking to Guy's men who will have the advantage, after being qualified, of going all over the world as Guy's men of the past have gone. We have far too much inbreeding in London and the home counties, and we are inclined to forget that what is the usual procedure here may not be the point of view more generally accepted. If you go to Amsterdam you will find a great centre where surgery is done from a different point of view from that which obtains in England. In England surgery is carried out as a rule under general anæsthesia unless there is some particular reason why it should be done under local anæsthesia. In Amsterdam all the surgery is done under local anæsthesia unless there is some reason which contraindicates that and makes general anæsthesia necessary. The view of the leading surgeons there is that local anæsthesia is kinder to the patient, and, although it involves a greater strain upon the surgeon, it is on that very account the more worthy thing to do. To my mind that is the correct estimation of local anæsthesia as a general surgical problem. But as a rhinological problem it is all the more so. If for any particular reason the patient cannot be got to submit to operation under local anæsthesia, it is time to reconsider one's indications and possibly not carry out the operation.

I am looked upon as unorthodox with regard to this question of surgery of the nose and anæsthesia. But that is because the surgery outside London is so little known here, and London itself is a small "pocket of reaction" which has never advanced from general to local anæsthesia as every other rhinological centre in the world did over twenty-five years ago.

Amongst other advantages of local anæsthesia in rhinological surgery is the fact that the patient is up from the time of operation. Patients have scopolamine and morphia, and directly they have slept that off they are up and sitting in an arm-chair. As I have already said, the difficulty is that in a hospital ward of to-day it is necessary for the patient to go to bed at night-time. But in nursing homes I am more and more keeping these patients upright the whole of the time. Some of you young fellows that I am addressing will have the responsibility after this war is over for the re-building of Guy's, and one of the arrangements that you must make will be that patients operated on, whatever the part of the body concerned, may be set up, made permanently comfortable, not in bed, but with proper apparatus, such as a chair, until they are well.

Then came the Great War. I remember drinking French wine with a quartermaster in a little village near Arras, and he put me in a chair which he had had specially made, with flat arms on each side, and it suddenly struck me that this was the position in which we ought to carry anybody who had been hit in the abdomen. If the Fowler position is right for a patient after an abdominal operation—and I do not believe that there is a surgeon who would say that it is not—then the wounded person hit in the abdomen should be put in that same position at the earliest possible moment and steps taken to keep him there until he is well. Later in the war the brigade to which my field ambulance was attached spent about three months in Thessaly underneath Mount Olympus, keeping an eye on King "Tino" of Greece, because it was not known whether he would come in on the German side or on ours. While we were there some very clever carpenters I had under me started adapting the quartermaster's chair to a "travois"—a conveyance made of a couple of sticks hanging behind a mule's tail, which was issued to us for the transport of the wounded over the mountains. These "travois" proved to be quite useless, because the friction was so great that it was more than a strong mule could do to pull one uphill, and because they were very uncomfortable and unpleasant things to be in. Once, going over some bumpy ground, they upset me altogether, and then I pointed out that in carrying the patient it was not necessary to have him vertically upright, but that an angle of 45 degrees was all that was required. Therefore they made a carrying chair on the poles of an army stretcher which they put on a mule litter and this we used in the line in Salonika, and subsequently, in ambulance wagons, in the mobile warfare in Palestine. All the people hit in the abdomen were collected by our field abulance and carried in that position.

But it is not only a question of people hit in the abdomen. Lung cases need it just as much, and anybody hit in the upper respiratory tract needs it also. That is "obvious" when one comes to think of it, but it is extraordinary how seldom anybody does think of the "obvious" thing. I am not going into this subject any more because it is not applicable to my present work.

My next experience was in the great influenza epidemic of 1918 when I was at a hospital in Cairo. The illness was so desperately bad that at one time I wondered whether we were dealing with cases of pneumonic plague. My immediate senior, who subsequently became a professor of medicine in the University of Edinburgh—I mention this to show that it was not the mere imagination of a throat "specialist" in his ignorance—confessed that the same thing had come into his own mind that very morning, and only after looking the subject up in Manson's textbook did he come to the conclusion that the cases were not this. In influenza with any suspicion of lung involvement the patient should be placed in the upright position and given "absolute" rest. The reason for such a measure is that it is necessary to get the air to the base of the lungs. It is not possible to carry on with the diminished oxygenating power of the lungs if the patient time after time has to lift his whole body from the reclining position. That brings us to the question of "absolute" rest. The only muscles that the patient is allowed to use are those of his eyes when he falls asleep and wakes up again. He must not be moved at all except for the amount of disturbance necessary for passing water.

After the experiences I have related I came back here to specialise in diseases of the upper respiratory tract. But I also held an appointment as otologist to the fever service of London and therefore I saw a variety of acute infections such as other people did not. I am quite convinced that every single person with an acute infection of the upper respiratory tract should be prevented from going to bed if that can possibly be avoided. What I preach is, "in bed in an arm-chair." The only reason for putting patients to bed is

that they need the rest of bed in order to save the heart during or at the end of the disease. One instance is diphtheria. The patient there has to be laid absolutely flat without any pillow for a certain period of time. There is no danger to the lungs, otitis media is not common, and even if it does occur it must give way to the requirements of the heart. It is the same with the septic type of scarlet fever. This condition has disappeared to-day, but it is well to remember that it will come come back. It has not disappeared as the result of the discovery of sulphanilamide. The reason why I can say that with the utmost confidence is that (1) this type of scarlet fever had disappeared before sulphanilamide was put on the market, and (2) there have been at least two previous occasions when scarlet fever has disappeared as a serious disease and has come back again in the virulent form later. One of these occasions was at the end of the seventeenth century, when Sydenham wrote that scarlet fever was barely worth being called a disease—in other words, it was about as serious as German measles is to-day. That mention of Sydenham brings to mind the fact that in his works he is constantly saying that if a patient has "fever" he must not be put to bed. As you read his descriptions you realise that many of the diseases he talks about are varieties of infections of the upper respiratory tract. The one I love best, without knowing what it is, is described as the "bastard peripneumony."

After this, the second of two instruments of precision was invented. The first instrument of precision was the watch, but the second was the clinical thermometer, which was invented towards the middle of the last century by a physician who died only a few years ago. The clinical thermometer having been invented, everybody got put to bed when they had the slightest rise of temperature. I am perfectly willing to admit that if a person has got an acute inflammation of the upper respiratory tract with a temperature so high that he feels "like nothing on earth," he may be more comfortable in bed than in an armchair. There are also those cases in which it is necessary to be careful of the heart; they are (1) acute pneumonia, (2) influenzal bronchiolitis. In those two diseases the patient has to be put to bed, not because his temperature is high nor because he is ill, but because it is necessary to have that absolute rest which will enable the heart to go on when he turns the corner and begins to get well. With those exceptions, I believe that every acute inflammation of the upper respiratory tract should be treated in the upright position, and the idea of bed should be given up in favour of the idea of an armchair. Everything else can be done exactly the same as in the case of a patient nursed in bed.

All that I have told you is intended to be merely introductory to the fact that so far as inflammation of the middle-ear cleft is concerned, the erect position is the most important point. We have thought, we have talked, and we have acted as though drainage through the mastoid region and meatal drainage were the important things in the treatment of inflammations of the middle-ear clefts; but neither of them compares in importance with Nature's way of drainage down the Eustachian tube, and for this the upright position is the most important measure. Everything that I have said is preparatory to the expression of my view with regard to the treatment of inflammations of the middle-ear clefts, which is one of the most important problems in the whole of medicine; but I have spent the whole of my time upon laying the foundations of the subject the developement of which must await another lecture.

This Medicine

"If the cow happens to be tubercular, it is passed into the milk and the individual drinks it."

"Patients with dentures should be taken out at night and put in a bowl of cold water in their locker."

[*Extracts from the notes of probationer nurses.*]

"We have much pleasure in giving the latest definition of the surgical staff which, we may incidentally add, comes from the medical side: 'Hewers of flesh and drawers off of water.'"

[*Guyoscope—February*, 1906.]

"On and after April 1st next, children under fourteen years of age can only be supplied in corked or sealed vessels."

[*Notice exhibited in all licensed premises referring to the Licensing Act circa*, 1900.]

". . . infant aged six months suffering from pneumonia, obviously dying . . . gave 0.5 c.c. —— intramuscularly . . . still holding on next morning . . . gave 1 c.c. . . . invalid never looked back, he went straight ahead to a beautiful recovery . . . ——is one of the drugs I would not be without."————, M.B., Ch.B.

[*Extract from advertisement.*]

This week's prize of 5s. has been awarded to Sister E. M. Yates, North Staffs Royal Infirmary, Stoke-on-Trent, for submitting the first two entries.

The Laws of the Take-In

(Reprinted from our old rival, "The Guyoscope," March, 1906.)

(With Apologies.)

NOW this is the law of the Take-in—
as old as the statue of Guy;
And the Clerk that shall keep it may prosper,
but the Clerk that shall break it must die.

The Law calls you only a Ward Clerk,
but be not ashamed of the term,
For the strength of the Firm is the Ward Clerk,
and the strength of the Clerk is the Firm.

When they tell you to open an abscess,
cut deeply, but never too deep;
And remember the day is for working,
and forget that the night is for sleep.

The H.-S. may browse in the morning,
but the Law it is clear and is sound:
"Remember the Clerk is a student—
go follow the Registrar round."

Keep peace with the little tin gods, Clerk—
Rude Thompson, H. L. and R. P.,
And do not be rude to your dressers
when they say to you, "Get out the tea."

Remember your duty at "ops.," Clerk,
to carry the tray and the pail,
And keep your hands clear of the towels
or asepsis cannot prevail.

The reward of the Clerk is refreshment,
and when he feels thirsty at night,
Not even the H.-S. may stop him,
the beer of the Clerk is his right.

If ye browse in the night-time be silent,
and wear not your boots in the ward,
Lest ye rouse the Night Sister from slumber,
and be by your brothers abhorred.

Ye may sew up a finger, or scalp wound,
if ye shave it and wash it again;
But sew not for pleasure of sewing,
and seven times put in a drain.

If a patient be drunk and insulting,
oh! knock him not down in thy pride;
But just call in Evans or Prestidge,
and tell them to put him outside.

Beer-right is the right of the bobby,
for each case brought up he may claim
One full pot of beer for his trouble,
and none may deny him the same.

Tea-right is the right of the Extern,
for each case brought off he may claim
One cup of hot tea from the Night Nurse,
and she may not refuse him the same.

Pus-right is the right of the septic,
to go to the sea for ozone
He is freed from all calls to the Front.
He is judged by the H.-S. alone.

Because of his age and his cunning,
because of eight letters or four,
In all that the law leaveth open
the word of the H.-S. is law.

Now these be the Laws of the Take-in,
and many and mighty are they;
But the brain and the upper and lower
and the trunk of the Law is—Obey.

[Our traditions and their value are hovering in the balance, but the topical nature of this poem of thirty years ago will serve to record our sorrow at the passage of yet another time honoured custom. While on the question of verse we print below a few lines on a modern problem.—ED.]

THE STRANGE EXTERN

Now has he just come down from Chelsea, or has he been short of the cash?

Has he been all embarrassed and shy, lest his youth is betrayed by his face?

Is the water too hard in the College, or has someone stolen his blade?

We feel it is most unhygienic to provide such an obvious nidus

For pulex and pediculus;

To which they may leap from the District and come back with him into the Room.

But we hear that the true explanation is a fever, infectious and painful.

Conservative treatment resulted in growth of a rich golden crop, which—no, never—

He could not remove while so tender. So hence its still there we presume.

Sector News

Guy's Letter

WE have this week to bid a sad farewell to Ted Nicholson who is, we are glad to say, now happily installed at the Royal Surrey County Hospital, Guildford. In his place we welcome G. A. McClintock.

Rumour has it that each house appointment now carries with it the assurance of an uninterrupted three months : if this is so, we welcome it, for such a feeling of permanency will afford some continuity of treatment for our patients and will add greatly to the efficient running of the wards.

The influenza menace is rapidly abating : for this, we have in no small measure to thank the authorities for the accommodation and treatment so readily provided in the Eye Ward for those of us who were stricken. German measles has produced more casualties amongst the nursing staff, but a more childish fever still is to blame for the apparition now amongst us, which, having left us, spotted, some fortnight ago, has reappeared with a growth, the result, so he claims, of a bet.

On Sunday, Guy's played a prominent part in the monster A.R.P. practice ; we personally spent a pleasant morning discussing coffee in our various sites of duty, but we understand that the work of receiving cases was carried out with cool efficiency, by students and officers alike.

Owing partly to the unavoidable absence through ill-health of our hæmatologist, Dr. Waterfield, and partly to our zealous quest for knowledge, we have in the past been in the habit of performing blood pictures upon a selection of our cases. This also has been both a check on and an aid to the ward clerks, who have so ably co-operated and helped to perform these tasks. The facilities available stood always in inconvenient contrast to the old clinical laboratory, but we accepted them as inevitable, if temporary. Now to our horror, we find that no counting chamber at all is provided after 5 p.m. : during the day, the formalities to be fulfilled before a chamber can be obtained are such as to discourage the keenest student. Blood counts by housemen and clerks alike have become an impossibility. We hope that clinical acumen may enable us to differentiate between pernicious anæmia and chlorosis, but an emergency white count can be a life saving measure. This obviously is an impossible state of affairs and, whilst we agree that the loss of two counting chambers in a week cannot be tolerated, some solution must be found immediately.

Spring has come at last—thanks to the magnaminity of their president, the house officer's table has moved from its comfortable situation by the fire to the heights of draughty exclusion at the head of the restaurant ; exposure to the elements at all hours as he visits the Borough on errands of mercy, has toughened his skin against all appeal by his less hardy colleagues

N. A. N.

Pembury Letter

IN our last letter we raised the question of the accommodation provided for the nurses at Pembury. We believe we may have evoked a solitary extra-systole in some official cardiac cycle, but since then the matter has been allowed to lapse, and the nurses remain in dark, dank, dreary dungeon. There may be some idea that the youth of 1940 must be made to endure the hardships suffered by the youth of 1914, and if this is an example, we are not impressed. Incidentally we believe this insanitary experiment has proved that the modern nurse can tolerate discomfort just as cheerfully as her forebears ; but we do not believe that exposing her to unnecessary hardship under the propaganda cloak of the " Divine Calling of Nursing " is either good theory or justifiable practice.

Our resident staff has been augmented by the arrival of Rowlandson and Watts. They are welcome in our midst, and we hope they will enjoy their time spent with us. In all other respects our staff remains unchanged, except that one or two people have been rendered temporarily *hors de combat* by our old friend the 'flu.

A few weeks ago we transferred a child suffering from bronchiectasis back to Guy's. This week he was sent back to us with a diagnosis of " Mental Deficiency and Birth Injury." We have never doubted the miracles of modern medicine performed at Guy's, but surely this is a record metamorphosis ! After due consideration, however, we have decided that the diagnosis is still bronchiectasis.

Pembury and environs have been suffering from a mild epidemic of German measles. It would seem that this particularly Aryan virus, suffering from a deficiency of *Lebensraum*, is also conducting a *Blitzkreig* against the British Empire. No doubt the Berlin-Moscow axis allows the rash to retain

its reddish hue, but as it starts to fade there is always the brown colour underneath. "Up, Guy's, and at 'em!"

N. M. J.

[We stick to our guns. The new diagnosis was no fabrication of ours but happened to originate from one of the Pembury Physicians, so that we did not lightly abandon it.—ED.]

Orpington Letter

A post-influenzal peace has settled upon this Institution (hospital to you, Sir) and we are again able to take stock of our position in our primary duty of receiving air-raid casualties. It is likely that if and when air-raids start the casualities will be heavy, and it is distressing that after six months of war we could at this moment receive only about 100 patients without removing our infirmary patients elsewhere. The new block, which like the medical quarters has for months been ready to open in a few weeks, is still far from complete, and it is likely to be some time before more than two of the wards are ready. This is to some extent due to innumerable burst pipes, a disaster which with a little forethought might have been avoided.

In the meantime, we have been playing at air-raids. The first game was one afternoon a fortnight ago during a local practice, when we successfully dealt with eight casualities whose arrival we had been told to expect some days before. The second was last week-end when with no warning of any sort, an ambulance appeared at the reception room door just after 10 a.m. on Sunday morning, closely followed by two others and later a fourth. It is a great compliment to our intelligence department, that there was sufficient personnel on the spot qualified to deal with the situation.

The other day the first of what we hope will be a regular series of hockey matches between the nursing and medical staffs took place on our football field. The doctors failed at the outset to produce a full side or any enthusiasm. Their opponents had rather more of each, but the former was overcome by the transference of Sister Marriott, the latter by a wait of half an hour on the field before the doctors arrived. After much apologising, the game started and the first goal was scored by Dr. Campbell after a magnificent dash up the field through most formidable defences. Half time came more in deference to the condition of the players than any preconceived arrangement and found the score equal. In the second half, the doctors forged ahead and, after a magnificent drive into the opposing goal from the half way line by Bowen-Jones, obscured for the moment by the smoke of a passing train, it was thought advisable to conclude the match while damage was still negligible.

We have lost C. Halamandres and E. I. Davis, and in their places welcome A. H. Knight and Matthewson. Our apologies are extended to Mr. Laurenson for the caricature of his name which appeared in our last letter. The editors will doubtless welcome the outcome—the typing of the Orpington letter. Cupid is still advancing on the Orpington front and we have much pleasure in congratulating his latest victim, Sister Griffiths on her engagement.

G. L. L. R.

[We are not quite sure whether the typing has altogether improved matters.—Ed.]

Joyce Green Letter

WE apologise for the absence of a letter from here in the last two issues of the *Gazette*. There have been many changes during that time, chiefly of personnel. Crone has left us for the Navy; Forbes, Johnson and Glover have returned to Guy's; Stewart has gone to Pembury, and Davies has returned to Wales. Our new arrivals are Hutton, Turner, Rilstone, Wills, Scott, Barr and Jamieson—our new Resident Surgeon. When we mention that we have also had fleeting visits from Maile, A. C. Greene and Silvester, it is understandable why the patients wonder which doctor is really looking after their ward. The following incident illustrates that this dubiety extends also the nursing staff. A doctor who was here for a short time was doing his night round and happened to be carrying a case. He went into one of the wards only to be told by the nurse: "The taps are quite all right to-night, thank you!"

We have been receiving large convoys of patients lately, mainly from L.C.C. hospitals, and new wards have been opened in quick succession. Though it is exhausting work dealing with so many new cases, there are nevertheless many interesting ones, especially on the "medical" side.

Yet another, perhaps more noticeable, change has occurred here, due, we think, to the approach of various examinations. So great is the rush to the books after dinner that we are sure our stomachs are being ruined. Yes, we are studying, and gone are the former hilarious days; in fact, one of our number, using the popular phrase, has

suggested that our name should be changed to "Joyce Been." There has, however, been one reversion to type in the way of the Nurses' Annual Dance, which was accorded a record attendance by the medical staff.

We read of 'flu in other parts of the Sector, and we, too, have had our dose of it, but at the moment we are struggling against two of the fevers which are widespread at this time. Some of us have to go round our wards camouflaged like Finnish soldiers. So far we have only parted with one of our staff, Barr, and we are glad to hear that he is progressing satisfactorily. It is not surprising that a sore throat at this time takes on an added significance, and we frequently part the hair on our manly chests, searching anxiously for punctate erythema.

L. G. S.

Age and Experience

The Presidential Address delivered to the Dental Society at Sherwood Park at 6 p.m. on 26th January, 1940, by the new President, Mr. H. L. Messenger, M.C.

GENTLEMEN,—I know that I am skating on very thin ice when I mention the word "Age" to any man who has left school only recently. It is a strange fact that one may only admit to having been at school when one is approaching the age of reminiscence. However, I am casting no reflections and I make no apologies, therefore, for choosing "Age and Experience" as the subject of these few remarks.

In so far as any of us can be said to know anything at all, we know it by virtue of our own experience. No topic, therefore, could be more suitable as a subject of address from a lecturer to those he lectures. Without in any way belittling the value of the Dental School curriculum, one has to admit that a lecturer spends much of his time retailing book-knowledge to people whose future experience will not be wide enough to confirm it. Teacher and Taught conspire to preserve a lecture-room tradition of classical phrases and formalised representations of the experience of others. These are just as capable of closing the mind to further learning and stifling the powers of observation as they are of acting as a guide to individual experience.

Most educated people, and I dare say it is not confined to them, tend to think at secondhand. Let me say the word "polymorph" to you, and you tend to think, not of a scarcely visible gelatinous speck moving just below your fingernail, an object as real as the fingernail itself, but of a crimson circle, the size of a lentil, having within it a number of deep violet lumps joined together by their ends like a string of sausages. The latter conception, although a serviceable diagram for diagnostic purposes, and a pleasant excuse for the colourful and surrealist decoration of histological textbooks, has no more than a purely arbitrary relation to the minute, vigorous, mobile cell it so inaccurately represents. There is, of course, a sense in which all knowledge which is susceptible of verbal or pictorial expression is only indirectly and distortedly expressed thereby. Moreover, the symbols we use to express our own experience are usually more or less arbitrary. Their connection with the object they represent may be obvious, or it may be lost in some historical event or association long forgotten. It may be the product of great insight and understanding or it may be the result of a trivial and very often temporary and inadequate association such as a child would observe. This is as true of words as it is of other symbols, and they also are capable of obscuring the meaning of experience and causing it to retreat into a secondhand world of phantoms and half-truths. No symbol can avoid overstressing one aspect of the object or experience it represents at the expense of others.

Academic lectures and even practical demonstrations of a scientific subject are no more than symbolic representations of the knowledge acquired during centuries by those directly or indirectly responsible for them. This does not mean that they are untrue, but that, however erudite and however extensive, they can but give brain knowledge which is only a guide and can never be an inspiration for skilled practice.

Many of the characteristics which distinguish a good from a bad practitioner are not transferable from one person to another, but arise from the more or less fortuitous education of the irrational faculties of instinct and intuition, faculties whose education is not systematically undertaken by any academic curriculum. These faculties only come into play in the course of practical experience. Indeed, experience might be defined as the sum total of those events in our lives which result in the acquisition of irrational knowledge, a knowledge whose expression in rational or pictorial form can never be more than an indirect and more

or less arbitrary and inaccurate version of what we know.

Now all this has clearly something to do with age, although not by any means as much as popularly supposed. Very little happens to most of us. Our lives may be stuffed with events without those events having more than the most superficial effect on us. Indeed, people whose lives are most full of incident are often those who are least experienced. The principal reason for this is that understanding involves responsibilities which rule-of-thumb action avoids.

Most of us use the knowledge we acquire in our academic studies in much the same way as a housewife uses the switch of her electric refrigerator. You press the button and you get the ice-cream. The textbook says that a certain course of treatment is indicated in a certain condition. The average practitioner applies it, and in nine cases out of ten achieves a positive result, which he attributes to the efficiency of his therapeutic measures with as much faith and no less superstition than the quack has in a decoction of dogs' ears and birch bark. Consequently a completely false idea of the nature of cause and effect arises in his mind. All therapy is to him magic, and, therefore, taken as a matter of course. The magician knows that if you stand in a pentagram while you invoke evil spirits, you are not found by the chambermaid gibbering in the corner by the washstand when she brings in your early tea. The pentagram works, and that is all there is to it. Cause and effect; pentagram, no devils; refrigerator, ice-cream; therapy, cure. Knowledge to most of us is a talisman and cause and effect is magic.

Real experience is much more than this. The difference between the expert and the average practitioner is that the expert knows his craft, while the average practitioner knows about his craft. He only knows the fact that there is a linkage between what he does and the results he achieves, but he is content to take the mechanism on trust. He knows the rules, but he is at the mercy of the exceptions. He succeeds nine times, but it takes the expert to succeed in the tenth. To the expert, diagnostic rules and indications which to the ordinary man *are* diagnosis, are merely useful guiding hints and signposts, solid crystals in the fluid matrix of intuitive conviction. So much is this true that the specialist may make a wrong diagnosis which the more polished rule-of-thumb methods of the assistant could have avoided.

Why, then, is the "old hand" not invariably an expert? Why does practice usually not make perfect? What is the difference between experience and mere facility? It is in this that the expert loves his craft, and in love are the faculties of intuition alone developed.

I greatly appreciate the honour which you have conferred on me by electing me to be your President. I will do my best to serve you. We will have meetings and we will get a lot of fun out of them. In doing so, in spite of our ages, we will acquire Experience.

Recent Changes in the Emergency Medical Service

THE Emergency Medical Service has now been functioning for a little over five months, but even in that short period it has undergone a number of changes which amount almost to a complete reorganisation. The reason for these changes is not far to seek. Prior to last September it was confidently anticipated that heavy casualties caused by air raids over London and the important industrial and coastal towns would be the main feature of a modern war, at least in its early stages. The Sector Scheme, with its plans for speedy evacuation from the inner to the outer hospitals, was evolved to cope with the danger, and the fact that it has not been tested out cannot be adduced as an argument against its soundness.

The Guy's Sector originally included no fewer than 70 hospitals of all kinds, providing nearly 20,000 beds, of which approximately 11,000 were allocated for casualties. For these beds the E.M.S. enrolled nearly 400 medical men of all grades, ranging from house officers up to the senior members of the visiting staff of Guy's. Although individual members of the service may have regarded themselves, not unjustifiably, as being grossly underpaid, the cost of the whole service was naturally heavy and was estimated to be round about £1,000,000 per week for the whole country, apart altogether from capital expenditure on new huts, equipment, beds, etc. It will be appreciated, therefore, that, when the original anticipations proved to be wide of the mark, it became necessary to effect economies wherever they could be effected without serious risk. In addition, the needs of the ordinary civilian sick have become increasingly pressing as the months have gone by without air attacks, and it has become increasingly evident that the services of medical staff must be

rendered available both for private work and for normal hospital services.

These and other reasons account for the changes which have had to be introduced. Take the case of house officers. In the initial stages of the scheme in the early part of 1939 the Group Officers' contention that house officers must form an integral part of the scheme had rather a cool reception. Later, it was decided to enrol house officers and, much to the surprise of the Group Officers, to pay them at the rate of £350 a year, on the ground that otherwise they would be likely to go straight into one of the Services immediately after qualification. The contracts for a year which some house officers obtained were issued owing to a misunderstanding, and as soon as this became known to the Group Officers the position was clarified and subsequent contracts were issued for three months only. At the same time, as the Services had agreed not to grant a commission to any man who had not been qualified for at least six months, it was felt that the rate of remuneration was unnecessarily generous and the arrangements for house officers were subjected to revision. As a *quid pro quo* for their concession, it was agreed with the Services that, as a general rule, house officers would be released after they had held appointments for six months. Owing to the frequent changes in personnel it was decided that house officers, as individuals, should not be enrolled in the E.M.S., but should be appointed and paid by their own hospitals, which would be reimbursed by the Ministry of Health. At the same time, an establishment of house officers for casualty beds was laid down for each hospital, no account being taken of beds for the civilian sick. The Ministry agreed to pay hospitals at the rate of £200 per annum per authorised house officer, and suggested that where the number authorised was not sufficient to meet the needs the additional house officers required might be remunerated by pooling the total sum. Thus a hospital with 200 casualty beds and 150 civilian sick beds was given an establishment of five E.M.S. house officers for whose services the Ministry agreed to pay the hospital at the rate of £1,000 per annum. But, to run efficiently with its civilian sick beds, the hospital required a total of ten house officers to whom it normally paid no salary. If the pooling system were adopted it would be possible in this particular case for each house officer to receive £100 per annum without additional expenditure being incurred by the hospital.

Guy's normally has 26 house officers plus a variable number of assistant house physicians. At the outbreak of war only nine were retained at Guy's and the remainder were distributed to Joyce Green, Farnborough, Pembury, Orpington and Preston Hall. The Ministry suggested to the local authorities concerned that Guy's should be allowed to appoint and pay the house officers authorised for these hospitals, and the L.C.C., the K.C.C., and the British Legion have all accepted this suggestion, with the result that all the house officers appointed by Guy's will receive the same remuneration wherever they are attached. This will be approximately £160 per annum, but the actual figure depends on the maintenance of the full establishment authorised at each hospital.

Instructed in the first instance to make plans to cope with heavy casualties in the initial stages of war, the Group Officers were satisfied that the problem of staffing adequately so many hospitals for casualty work could only be solved by a whole-time medical service. The unexpected course which the war has taken has rendered such a service wasteful from more than one point of view. Consultants attached to outer hospitals have found time hanging heavily on their hands. Private patients have experienced difficulty in getting advice and treatment, while the Ministry felt that the salary bill was unjustifiably large. Premature attempts to introduce a part-time element were unsuccessful, but the scheme published at the beginning of December has proved acceptable to to large majority of those concerned and full advantage has been taken of it.

There are not wanting those who feel that the E.M.S. has been dangerously weakened by these changes and that no alterations should have been introduced until the experience of the spring and summer was available on which to base a judgment. Time will show whether these fears are justified, but, at any rate, the great majority of the individuals concerned are much happier than they were, and the Service as a whole is much less disgruntled.

T. B. J.

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The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

An Exercise in Hæmatology; Or a Blood Count on Sunday Afternoon

FEW people look forward with relish to doing a complete blood count. The intricacy of its technique requires considerable manual dexterity, a good appreciation of colour, and some mathematical ability. All these qualities might be expected in a hæmatologist, especially one who manipulates telescopes to observe the stars, and is able to calculate their positions in a mere thousand years. Could the stars foretell that a house-officer is required to have an extra quality, that of a muscular pair of legs? The technique of a blood count on Sunday afternoon at Guy's is one of some complexity, consisting of three main divisions—catching your patient, obtaining your apparatus and then doing the blood count. Of these three divisions by far the most difficult is that of obtaining the apparatus, and that is why a good pair of legs is required.

In quite a cheerful frame of mind one walks across to the second floor of the Pathology building, to that nice laboratory specially set aside for our use. But something has changed, because the main door is locked, as is the door on the other side of the landing which leads to the emergency blood store. A little annoying to have walked right up here, having barked one's shins on the dark stairs, but if this one is closed the authorities must have re-equipped the old Clinical Laboratory. Who reads the notices, anyway, when half of them are three months out of date? And if one lift in the Medical Block is out of order and the other one being used, who worries about walking up to the top when all the stuff will be just where it used to be—those convenient little cardboard trays with pipettes and counting chamber all complete. Disappointed, one finds plenty of dust and dirty broken 10-c.c. pipettes, a few uncleaned test tubes and several bottles of bromine waiting for a bomb to make them really dangerous. There are two large notices about switching out the lights, so someone must go up there.

The count has got to be done before to-morrow, so let's do some scrounging in the wards. Hæmometer in one, but the acid is full of moulds, some Thoma's fluid in another, some decent acid in a third, and a white count pipette in the last. The counting chamber was found in a most unlikely place, and the Leishman, borrowed from the Male Annexe; it's lucky the microscope is not in Uncle's keeping—which it soon will be if some money doesn't materialise!

The blood count was normal. E. R. D.

Correspondence

"The Future of Clinical Teaching"

To the Editor of the GAZETTE

SIR,—You have been kind enough to comment in Passim on my *Lancet* article entitled "The Future of Clinical Teaching." This article was written not only with a view to disburdening myself of certain ideas and hopes, but also to stimulate thought, discussion and action in others. It has brought me already a sheaf of sympathetic letters and a few criticisms from teachers and consultants in London and the Scottish and provincial universities. I am hoping to have comments and criticisms from my Guy's colleagues too. I could wish that you, Sir, had not begun by misinterpreting certain of my statements and my views.

Thus you say that I am "eager for the state to accept the responsibility of organising medical education on an efficient basis." In fact I ask for state-aid but not state-control, and particularly emphasize the importance of preserving academic liberty and keeping internal administration in the hands of the schools and universities. Six months as a Group Officer in the E.M.S. have not enamoured me of bureaucratic control.

In criticising the suggestion that there should be whole-time directors of the medical, surgical and obstetric services you omit to mention that I seek to combine the advantages of whole-time and part-time teaching in a way which has not yet been attempted in this country and which should do justice to both. And finally why you should go on to assume that a whole-time teacher would teach only with examination pass-lists in view and that it would be more dangerous for students "to accept his way of thinking" than that of part-time teachers I cannot imagine. Cranks and dogmatists are surely more common in the ranks of the teacher-consultants than in those of the professors.

But these rejoinders are only by the way and what I would really tilt at most strongly is the

complacency to which Dr. F. G. Lloyd refers in your correspondence columns this week, a complacency which tends to accept that things are good enough as they are and which prefers to believe that institutions with fine old traditions, even " the unique tradition of Guy's ", need not be too concerned about reforms. The world is changing rapidly and it is our urgent duty to plan so that our own contributions to this change may be for the general good. In medicine, medical education and the organisation of our hospital services no one will help us if we do not help ourselves—and others.

To return to the question of the conflict between teaching and practice, which was the main thesis of my article, I do not now mind saying that nothing would have prevailed upon me to leave Guy's four years ago had not that very conflict destroyed my hopes of ever being able to devote a greater proportion of my time and energy to teaching, or to the advancement of teaching and research.

This term at Cambridge I have had a glimpse of what might be, for, owing to the uncertainties of the situation in the London sectors, I have retained out of a preliminary clinical class of 40 students catered for last term, nine keen medical ward-clerks. Their laboratory adjoins my office and is also our tea-room. In addition to ward-rounds I give them a weekly lecture, correlating clinical medicine and pathology. They have rounds with my Reader in Medicine, Dr. R. A. McCance, and an out-patient and a follow-up session with a senior research assistant. They have a weekly demonstration on X-ray interpretation and act as post-mortem clerks in rotation. They carry out the blood-counting and clinical laboratory work on my cases and, living almost on the premises, still have ample time for their own cases and opportunities for informal discussion. They are not spoon-fed. We do not think of examinations. We are students together. I do not believe that any firm of mine at Guy's, although I did my best in the circumstances, was ever given " so square a deal," and yet this is only a temporary and improvised class. I do not see why similar and better advantages should not be made available for every clinical clerk and dresser in the land. I am in no wise forgetful of any of the good things that have come out of Guy's or from the older systems of clinical teaching in London and elsewhere, but I am convinced that something much better still can emerge from present chaos and uncomfortable transition if only we will begin to work and plan now, before it is too late and before less desirable changes are forced upon us.

I am, Sir,
Yours faithfully,
JOHN A. RYLE.

5, Herschel Road,
Cambridge.

The Take-In System.

To the Editor of the GAZETTE

SIR,—There are no doubt many of us who have read with interest Dr. Lloyd's letter regarding the Take-In system at Guy's, and there is no doubt in my mind, and I know in the minds of many other old Guy's men, that it is time the system was changed.

As Dr. Lloyd so rightly says, the admission of a patient into Guy's really depends upon the courtesy of the Take-In H.S. or H.P. Of course no patient should be refused admission into a Hospital, when a request comes from a Doctor, and when there is a bed vacant. In this case personal contact with the H.S. or H.P. is unnecessary, and admission could be arranged much more speedily through the Superintendent's Office.

I am quite certain that if it were possible for the present Surgical and Medical Staff at Guy's to go into General Practice for a short time, the present system would soon come to an end.

May I claim a little more space to condole with the Residents. They certainly have a grievance. It is very hard to lose those three guineas, much harder I should imagine than losing the experience of appearing in Court or writing a P.M. report. Perhaps B.I.D.'s are not looked upon in the same light as they were in my days.

Yours, etc.,
R. B. SUTCLIFFE,
(*late Pres. Res.*)

Reviews

The Study of Anatomy. By S. E. WHITNALL, M.A., M.D., B.Ch., F.R.S. (Canada). Published by Messrs. Edward Arnold & Co. Fourth Edition, 1939. Pp. 124. *Price* 4*s*. 6*d*.

A FURTHER edition of this excellent book serves to remind students of all ages of the wealth of interest to be obtained from Anatomy. The author has maintained his informal style and extended it in this new edition to cover the relation of anatomy to Preventive Medicine and Physical Exercises, and to include further remarks on Teaching and Lectures. The main value of the book lies in its insistence on the need for sound general principles rather than

extensive knowledge of detail. This message is welcome in these days of increasing specialisation and can be applied to every branch of medical study. The author's wide knowledge of literature enables him to include many quotations which illuminate his suggestions and observations. The comprehensive bibliography makes the student to-day wish he had time to emulate the author's example and to broaden his outlook by wide reading.

H. F. L.

Treatment by Manipulation. By H. JACKSON BURROWS, M.D., F.R.C.S., and W. D. COLTART, M.B., F.R.C.S. Published by Messrs. Eyre & Spottiswoode, Ltd. Pp. 36. Illustrated. *Price* 5*s.*

IT is, perhaps, a blow to our pride to have to acknowledge the publication of a much-needed book by two of the surgeons from a rival hospital. It is indeed time that the medical profession recognised the place of manipulative treatment so that there should be less confusion concerning the " mysterious " art of the osteopath. This book sets out clearly and briefly the indications and methods of this form of treatment, the latter being adequately illustrated with serial photographs. At the same time no attempt is made to conceal the dangers which beset the unwary, or the type of disability which gives disappointing results. This book is an excellent commencement to the series of *The Practitioner* monographs, which Messrs. Eyre & Spottiswoode are publishing.

H. F. L.

Roller and Triangular Bandaging. By MARY FARNWORTH, S.R.N. Illustrations by MAUD RUDDICK. Published by Messrs. Faber & Faber, Ltd. *Price* 3*s.* 6*d.*

MISS Farnworth's book on bandaging, roller and triangular, is a most refreshing treatise on this interesting section of a nurse's work. The general arrangement in sections is good. The text is concise, direct and yet sufficient, but what makes the book so useful is the series of illustrations, splendidly drawn by Miss Maud Ruddick. These, taken in conjunction with the text, greatly simplify the task of understanding the intricacies of the bandages. The book is also invaluable to those who wish to become proficient, but who may not always have a subject available.

M. C. M.

Preliminary Questions and Answers. By F. NORTON, S.R.N. Published by Messrs. Faber & Faber, Ltd. *Price* 2*s.* 6*d.*

THE sixth edition of Miss Norton's excellent handbook is likely to prove a great boon to nurses preparing for " Prelim.," as well as others who want to know just what examiners expect. The model answers in every way justify the claim of the author, as to conciseness and accuracy.

A study of these answers, 135 in number, clearly indicates the degree of technical ability which is expected of those anxious to pass the first step towards State Registration, and illustrates the importance of omitting matter which is not relevant to the question under consideration.

Since the questions answered are taken from actual examination papers, even the most recent, this book is strongly recommended to the attention of all junior nurses.

M. C. M.

Muir's Bacteriological Atlas. By C. E. VAN ROOYDEN, M.D.

THIS is the second edition of this well known atlas of bacteriology. It has been enlarged and the text rewritten. The previous high standard of the illustrations has been maintained and the colour printing is excellent. There is little to disagree with in the illustrations, though one would rather have seen an illustration of the leptospira icterohaemorrharica showing the typical "button-hole" appearance seen in the cultures of this organism in certain liquid media and many times in exudates than the all too excellent illustration (Plate LXIII) which shows the fine coils which are frequently very difficult to see in this very active organism. The remark relating to Micrococcus tetragenous (Plate II), that the organisms "are surrounded by a capsule indicated by an unstained halo," is in our opinion misleading. Our experience is that an unstained halo is as frequent in organisms usually regarded as non-capsulated as in the capsulated organisms; an opinion which receives support from an examination of other plates in the book in which non-capsulated organisms such as Bacillus abortus are shown with unstained halos far more marked than that in the illustration of Micrococcus tetragenous.

The terminology might have been modernized in one or two places; the use of the term Streptococcus mucosus is surely unnecessary and confusing for the student as it will not be found in the index of the modern text book. The general execution of the book is, however, of a high order and it will be found useful by many in teaching, while the illustrations of the virus diseases and the protozoa will be useful for reference purposes.

J. C. C.

Hospital Information, etc.

Notice

The Dental Society has recommenced its activities this term under the Presidency of Mr. H. L. Messenger. The Annual Dance will be held on Saturday, 9th March.

Papers by Guy's Men

Published writings of the late W. A. Maggs :—

Typical cases of overcrowding of the teeth. *Guy's Hosp. Gaz.*, 1905, xix, 31.

Antiseptic alveolar plugs for the after treatment of extractions. *Brit. J. Dent. Sc.*, 1905, xlviii, 676.

Secondary parotitis. *Brit. Med. J.*, 1910, i, 1051.

Bishop, P. M. F. Use of male sex hormone in treatment. *Practitioner* cxliv, 150.

Brock, R. C. Fibroid lung and brochiectasis. *Med. Press*, 1940, cciii, 102.

Broster, L. R. Tumours of the adrenal gland. *Practitioner*, 1940, cxliv, 135.

Thompson, Allan R. The treatment of parodontal disease in childhood. *Brit. Dent. J.*, 1940, lxviii, 81.

Lambrinudi, C. Intra-medullary Kirschner wires in the treatment of fractures. *Proc. Roy. Soc. Med.*, 1940, xxxiii, 143 (Sect. Orthop.).

Fry, W. Kelsey. The barrel bandage for fractures of the jaw. *Dental Record*, 1939, lx, 68.

Booth W. G. Acceptance of dental treatment. *Ibid.*, 76.

Changes of Address

Miss D. St. J. Blackman, Sisters' Quarters, Tidworth House, Tidworth, Hants.

C. H. Greaves, Lt., Army Dental Corps, St. Marys Church Hall, Forest Road, Selkirk, Scotland.

Reginald H. F. Pearce, Lt., Army Dental Corps, c/o Lloyds Bank, Ltd., Farnborough, Hants.

G. N. Wood, Lt. R.A.M.C., 10th Field Ambulance, B.E.F.

E. C. Zorab, Major, R.A.M.C., Military Hospital, Stoke, Devonport.

Marriages

BROWN—LONG.—On January 20th, 1940, at Downham Market, Norfolk, James M. Brown to Kathleen L. Long.

SEELY—DOWTON.—On February 16th, 1939, at Southwark Cathedral, Wm. Joseph Seely to Leonora Ethel M. Dowton.

Births

DORAN.—On December 17th, 1939, at Bareilly, India, to Jane, wife of Captain B. J. Doran, I.M.S.—a son.

FERGUSON.—At 27, Welbeck Street, on February 5th, 1940, to Frances Eleanor (nèe Jackson), wife of W. J. Ferguson, M.S., F.R.C.S., of Lockington, Kingston-on-Thames—a daughter.

Death

MAGGS.—On February 6th, 1940, at Rosehill, Bideford, William Adolphus Maggs, M.R.C.S. L.D.S., R.C.S.Eng., Consulting Dental Surgeon, Guy's Hospital, aged 84.

EDS. { H.F.L. N.A.N.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

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PASSIM

MAY it be not only the poet who is able to see the good in things around him. We shall try to find the good even amidst the ever-running flux of our wartime changes. We have noticed the refreshing breath of encouragement which comes this week from Pembury. We have heard also of excellent teaching at Farnborough, of good hockey at Orpington, and of short febrile holidays at Joyce Green. We shall continue to find much that is good if we spend a short time in contemplation of what this war has brought us.

Food-rationing, for instance, has enabled many hitherto insensitive palates to discriminate in an instant between butter and margarine; and the vitamin content of the latter has at last been standardised by law. We now take a precise note of the amount of sugar we are given. Thus our livers remain full of glycogen awaiting the mobilisation which adrenalin may demand whenever the siren is heard. The general increase in the cost of living has made it so expensive to live or to do "anything" that we do not do more of either than we can help, and our savings are thereby enlarged. We should also mention here the increased price of many familiar drugs which will cause us to consider awhile whether the patient will be benefited by their use—an exercise which the less experienced of us will indeed find stimulating. This is no place to consider the possible fate of the epileptic without his Luminal, the bronchitic without his Ipecac., or the District mother without her Ergometrine.

Again, the war has made conversation easier and more brisk. The news is always the same, so that one can without any effort keep up to date. The salient features of the news to-day are expressed by initial letters which save much space and time. Such abbreviation, perhaps intended to baffle the enemy Intelligence Departments, has long been known to the pharmacist with his p.r.n., s.o.s., and t.d.s. The physiologist has had his A.C.C., K.C.C., and C.E.S. The nursing staff puzzle the unwary with B.N.O., N.P.U., and C.S.U. But this tendency is spreading widely. We can imagine the B.B.C. announcing that an F.R.C.S. in the R.A.M.C. on leave from the B.E.F. (recently awarded the D.S.O. and married to one of the W.A.A.F.) had been admitted to an E.M.S. hospital via the E.B.S. suffering from P.U.O. N.B.—W.B.C. and R.B.C. normal.

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As in this issue we are seeking to "count our blessings," we must refer only briefly to the many threats to our composure, both written and unwritten, in respect of previous statements of the editorial pen. May it suffice to say that the question of the E.B.S. was raised because we have so few beds to spare that we were becoming a little disappointed to receive many sub-acute cases via this route and to be compelled to send good acute cases to L.C.C. hospitals. Whereas we stated a fact with which no one will disagree that a practitioner may err from time to time, we certainly never stated or implied that we were less likely to do so.

We are pleased to print a letter of appreciation received from a student who found the hæmatological services before Christmas all that could be desired. We wish to thank all those concerned for the rapid provision of equipment in the Clinical Laboratory to overcome the difficulties outlined in our last issue. We must also state that this equipment was provided even before the last issue was published.

▭

WE regret to announce the death of Lieutenant A. E. Hill, R.A.M.C., which occurred while he

was serving in a military hospital in England. He qualified at Guy's in 1925 and has since been in practice in Kimberley, South Africa. He was on leave in England when war broke out, and he at once joined the R.A.M.C.

SEVERAL of our readers have inquired about the means of obtaining copies of the *Gazette*. The annual subscription to the *Gazette* and *Directory of Guy's Men* (*Medical and Dental*) is 12*s*. 6*d*. (post free), and is now due. The *Gazette* alone will be sent post free for 10*s*. per annum. Untrained nurses at Sector Hospitals are sent copies at the reduced rate of 5*s*. per annum. Students are entitled to receive copies if they are members of the Clubs' Union (subscription now, four guineas). For the purpose of distribution a stock is kept in the Wills Library, and copies are also sent to the Base Hospitals, addressed in most cases to the Secretary of the Students' Committee. Any member of the Clubs' Union who is not receiving his copy should report this fact to the *Gazette* Office. It would also be of assistance if students at the Base Hospitals could make an arrangement with some permanent staff or office to which the copies could be sent for distribution. The Index for Volume 53 (1939) is now ready and may be obtained on application. All subscriptions and inquiries should be addressed to The Manager, the *Gazette* Office, Guy's Hospital, S.E 1

Treatment in the Neuroses

A Lecture to Guy's Nurses given at the Cassel Hospital on Wednesday, 2nd August, 1939, by C. H. Rogerson, Esq., M.D.

IN 1919 Sir Ernest Cassel, who had already done so much to help English medicine, decided to give a further large sum of money for the advancement of some pioneer work. He asked for three schemes from which to choose, and Sir Maurice Craig, then Physician of Psychological Medicine at Guy's, drew up one of these. He made suggestions for a hospital which should undertake the treatment of psychoneuroses in patients of moderate means. Sir Ernest was interested and spent a day with Sir Arthur Hurst, who was then in charge of his famous unit at Seale Hayne for the treatment of war neuroses. He was so impressed by this visit that he at once decided to adopt Sir Maurice Craig's scheme.

A large house was purchased standing in about 80 acres of grounds and the larger rooms were subdivided to make accommodation for 54 patients. By further alterations it has since become possible to admit 64 cases of psychoneurotic illness for treatment. The psychoneuroses had for a long time been the Cinderella of modern medicine, a nuisance alike to the general physician and to the alienist in the mental hospital. Yet this form of illness represents a large proportion of the total of ill-health. For example, Bruce Pearson, excluding all organic conditions found that 17 per cent. of the patients attending medical out-patients at Guy's were suffering solely from psychological disorders. This is clearly a conservative estimate, since in many cases neuroses co-exist with organic disorders. The neuroses have seemed dull and uninteresting to many partly because of a lack of demonstrable morbid anatomy, and partly because they were simply not understood. When interest in them is aroused they become one of the most fascinating of all branches of medicine, both from the medical and nursing point of view.

In attempting to classify the cases seen at the Cassel Hospital, one has to be very careful not to fall into those errors of thought which often seem excusable in certain medical diagnoses. For example, one tends to think of lobar pneumonia as an entity which can be lifted out of its context and studied like a pathological specimen picked off the shelf of a museum. One often speaks of the condition as having such and such a course, of resolving by crisis on a certain day, and so on. All very useful for examination purposes, but when one comes to deal with individual patients its usefulness becomes impaired by the fact that they often pursue a highly individual course of their own, not corresponding quite so closely to the textbook. This is because lobar pneumonia is not an entity which can be considered in isolated fashion, but a certain type of reaction between a patient and his environment, the noxious environmental feature in this instance being the pneumococcus. It is convenient that cases do tend to follow approximately a similar pattern, but unless one remembers that the illness is a reaction between the patient with all his constitutional and acquired resistances and weaknesses, and the environment with its varying degree of pathogenicity, then one is thinking loosely and dangerously.

So, and more so, in the field of psychological medicine. One has to deal with a patient whose response to the situations with which he is confronted has been determined by his constitution

and by his whole life history. The situations themselves may be infinitely complex and, since the symptoms of the illness are the product of the reaction between the patient and his environment, it is small wonder that we cannot easily put simple diagnostic labels on such complexities. We think instead, just as one really needs to do in a case of lobar pneumonia, of *reaction types*. We group together not hard-and-fast entities, but similar patterns of reaction which have certain features in common.

Among the neuroses we deal very frequently with one or two particular patterns of reaction. These are not entirely dissimilar to the reactions of everyday life, but represent rather pathological exaggerations of them. The pattern I would especially pick out for your attention to-day is the anxiety reaction.

You are all familiar with the sensations of anxiety. If someone was to throw a bomb into this room and it lay on the floor obviously about to explode at any moment, we should all experience certain broadly similar symptoms. They might include palpitations, nausea, sensation of gooseflesh, and a further list which you can complete for yourselves. In each one the pattern of anxiety would follow the same broad general lines with individual peculiarity of emphasis. Now there would be no doubt about the reality of such symptoms, but as the cause of them would be there in front of us we should not regard them with any concern as symptoms. We should in fact complain of the presence of the bomb, not of the presence of palpitations! This is, of course, a normal anxiety reaction. But suppose now that the source of anxiety was more individual and more subtle, and suppose further that the individual was not fully aware of that which was worrying him. It is easy to see that he might have the symptoms of anxiety just as acutely without being fully aware of the source of the symptoms. Then, instead of complaining of the source of the anxiety, he might easily begin to complain of the anxiety itself as a physical discomfort. He would not then say, " I am worried," but rather " I have palpitations," which might easily lead to a doubt concerning the state of his heart and hence to a chain of secondary worries. In this sort of fashion pathological anxiety reactions, or psychoneurotic anxiety states as they are called, frequently arise.

This symptomatology may be very diverse, just as diverse as the normal pattern of anxiety. Here, for example, is a typical case referred to us for treatment recently: A young man of 26 went to his doctor about four years ago with symptoms of indigestion. These symptoms had been present for a few months. He was examined and a diagnosis of chronic appendicitis was arrived at on the basis of an X-ray report. The appendix was removed and the symptoms were better for a while, but soon recurred and he began to lead a semi-invalid life, guarding himself against cold and living on a most careful diet. He tried a number of different treatments without success, and finally it became obvious that he was in a state of pathological anxiety, so that he was referred for psychological examination and treatment.

On questioning him it appeared that the symptoms of indigestion consisted of a vague epigastric discomfort with much eructation of wind and feeling of nausea. The abdominal sensation was, in fact, not unlike that which is often used by novelists to describe their hero's sensations when in danger. Phrases such as " he experienced a queer sensation in the pit of his stomach " or " his stomach turned over " represent attempts to describe feelings somewhat similar to the patient's. A physical examination and many previous tests both failed to reveal any organic disorder. A more detailed history was therefore taken and significant facts at once came to light. The patient was an only son, his mother had worried greatly over him and had developed the theory that he was " delicate " and must live an extra careful life. He had always lived at home, and in spite of minor neurotic symptoms had been quite well and happy until shortly before the present illness began when he fell in love with a girl of whom his mother strongly disapproved. He was torn by the obvious conflict, which was more severe than he realised, for he was greatly dependent upon his mother. The symptoms arose in this setting, and had the effect of at least postponing his difficulties, for as a sick man he was unable to pursue his courtship.

This represents a very simple example of an anxiety neurosis, but its treatment illustrates the problem of the treatment of these cases in general. In the first place it is necessary to recognise that his symptoms are real enough. These patients have commonly suffered from two groups of relatives and friends with opposite ideas. One group has sympathised with the patient and fussed over his health, encouraging him to go from one mode of treatment to another. The other group has told him flatly that there is nothing the matter with him and advised him to " snap out of it " or has said that his symptoms are imaginary. Both are equally ill-advised. The idea that symptoms are either physical in origin or else " imaginary " is very widely held. A moment's reflection, however, will show the fallacy of this

idea. Unless we are to suppose that all psychoneurotics are malingerers we cannot deny the reality of their symptoms. An imaginary pain in a contradiction in terms. Either it is a pain, in which case it is certainly real enough to the patient, or else the patient is a liar.

We have to reassure him in the first place that his symptoms are not due to any organic disease and then proceed to show him that this does not mean that they are imaginary, but that they are produced by mental conflict not by physical disease. We can usually illustrate this possibility by everyday examples familiar to the patient of symptoms which are emotional in origin. As previously stated, many popular novels are full of descriptions of visceral sensations arising under emotional stress. Some such examples can be pointed out to the patient. Having made him understand that his symptoms may have arisen in this way, we can then proceed to help the patient to trace the original conflicts which caused the illness. If he can solve these in a healthier fashion he will be able to rid himself of his symptoms.

This is the essence of the medical treatment of such a case as I have described, but obviously it may not be quite so simple to carry out in practice except in the earliest and simplest cases. The patient may require to be removed from the environment in which his conflicts are acute to the simpler environment of a hospital. The process of reassurance too may have to be repeated many times before he is able to accept it. In hospital the doctor may be able, perhaps, to spend half an hour a day with the patient. There are $23\frac{1}{2}$ hours remaining in the day when he will be exposed to other influences. These may be beneficial or harmful. It is part of the task of the nursing staff to see that they are beneficial. When the patient is first admitted he may require rest to enable him to free himself from some of the tension and anxiety of his conflicts. One can rest a limb by splinting it. One cannot splint a mind. To leave the patient alone in his room is not to rest his mind. On the contrary he will tend to turn his problems and worries over and over and thus become more tense and restless. Mental rest and relaxation comes through pleasant diversion and occupation. In a hospital for the treatment of psychoneuroses there should be ample facilities for occupation, ranging from the simplest hobbies which can be pursued with a minimum of effort to more vigorous outdoor activities. The nurse requires to learn something about rug-making, basket-making and the like in order that she may help her patients to find the diversion they need. She also has to create the right kind of environment for them, particularly during the early stages of their stay in the hospital when they will be more dependent upon her care. She has to learn by her attitude towards them to amplify the reassurance given by the medical staff. While being sympathetic towards the patient, she has at the same time to encourage him to carry on if need be in spite of his symptoms. Her sympathy in other words has to be turned frequently more towards the individual who is miserable than towards the actual physical symptoms which are an index of his struggles. In this way she will learn the art of gently persuading the patient into beneficent activity without becoming identified in his mind with somebody " who does not understand him," and who is misguidedly asking him to do the impossible.

It has been said that a nurse who is skilful with psychoneurotic patients is born and not made. This is a pessimistic view which I do not hold. Given an open mind and an intelligent interest it is certainly possible to acquire skill in handling these cases. Such skill comes with an understanding of the kind of mechanisms which lead to psychoneurotic illnesses. With understanding these illnesses cease to be irritating or perverse and become problems which can be considered objectively. When this has happened the question so often asked, " How do you have patience to deal with these things ? " ceases to have any meaning. We do not regard ourselves as miracles of patience because we spend a long time each day dressing an obstinate wound that takes a long time to heal. If we felt that the patient could cure himself with a simple effort we should become impatient, but we understand the problem and its difficulties.

So in this field of medicine. And because the problems and difficulties of our neurotic patients are not so unlike those presented by patients with an organic disease, we find that many of the principles learned by experience in this field will guide us in other cases. Who can deny the importance of the psychological factor in many acute conditions ? The correct psychological handling of the patient may make all the difference between life and death. Similarly a good approach to the difficulties of convalescence after a severe illness may save months in getting the patient more rapidly on his feet.

Time does not permit me to discuss the treatment of other psychoneurotic reaction types such as the hysterical reaction or the obsessional type of illness. Each presents its own special problems, which must be understood for the proper handling of the case.

This Medicine

" ' Lazaretto ' is the building in the Maze Pond in which the Guy's students live."

" Sepsis in operation wounds was common in hospitals before the pre-sister era."

(*Notes from probationer nurses.*)

" Stalin has been seriously ill since the middle of last month suffering from aneuria, lack of nervous power, according to reports in Moscow."

(Nervous breakdown ?—ED.)

" There was no news to-day of the missing bag of paronino-denzenes-sulphonamide tablets lost late last night. . . ."

(*Extracts from Daily Papers.*)

Gentlemen, I am pleased to say I have found —— all you described, particularly in my own case—Insomnia. I have since had a large bottle, and have derived much benefit from same.

Thanking you for benefit derived,

Yours sincerely,

(*Signed*) SISTER M.

(late Guy's Hospital, London).

(*Advertisement in Daily Press.*)

(Shame !—ED.)

" The Dental Society has recommenced its activities this term. . . . The Annual Dance will be held on Saturday, 9th March."

(*Gazette*, 24-2-40.)

(Discovered !—ED.)

" Treatment consists in tearing through the placental tissue, grasping a fœtal leg and pulling it down. . . . A gynæcologist must be sent for meanwhile."

(*Textbook of Surgery.*)

(The surgeon's limit ?—ED.)

Neurological case, speaking to his colleagues in the ward after a Keen Student had approached him in an unsuccessful attempt to examine him : " Another of those —— 'ammer fans ! "

The prize of five shillings is awarded this fortnight to Sister Gration, Guy's Hospital, for submitting the first two entries. Entries for " This Medicine " should arrive in the *Gazette* Office not later than the Monday morning prior to publication.

Sector News

Guy's Letter

THIS week, the Residents bid a sad farewell to D. M. Carter ; no longer of us, we are very glad that he is still with us, at the least for the duration of the Fellowship course. M. McCall has joined us in his place.

Thanks very largely to the Herculean efforts of Dr. Knott, the clinical laboratory has been equipped and placed at our service. We are very grateful for the facilities which this laboratory offers, and we would appeal to all who make use of them to co-operate in order that its efficiency be not impaired. The full list of the losses suffered by the Bacteriological Department during the past months is a poor requital for the voluntary services they have rendered, and can only be accounted for by the grossest carelessness.

On Saturday last, we welcomed the reappearance of the Starlings' Revue ; a full review of this entertaining show appears below, but we would like to thank all concerned for their attempt to enliven our very drab existence. Our " French " extern continues to revel in his attire, but another has seen the light of day, or won his bet.

Several changes are foreshadowed amongst our teaching firms and rounds ; Dr. Boland and Dr. Lintott are leaving us for the Army, Dr. Mann has gone, and one or more of the Registrars may soon follow suit. We shall feel their loss very greatly when they depart, and we hope that the present high standard of teaching will be maintained. To end on a happier note, we learnt last week that adrenaline is not a universal panacea, nor, to our surprise, does every hæmoptysis originate in the chest.

N. A. N.

The Starlings' Revue

WITH the Spring, appropriately enough, the Starlings have returned. Their latest show followed the established precedents, and may fairly be called a good average specimen. The two comperes, Jerry O'Gorman and Robert Moreton, were in first-class form. We may, perhaps, be permitted a twinge of regret that some of the latter's jokes fell below the standards of good taste. Of the three sketches, " The Infernal Triangle," with Robert Moreton and Mara, was

the most witty, albeit with a rather bedroom humour; whilst "Mr. Dorker Wants to Know," by John Gordon, was certainly the most topical. Its allusive virulence was rather terrifying, with its satirical references to some of the more burning problems of the Hospital. "Russian Interlude," also by John Gordon, was rather too slight to make any impression. The Works Department once again proved themselves masters of slapstick, this time with a slow-motion wrestling match. John Gordon had some new tricks, which he performed with considerable skill.

The best turn of the evening was undoubtedly John Forbes, with his dumb-show impersonations of a goalkeeper, an angler and a Wimbledon lawn tennis player (ancient and modern versions). His bland, unsmiling countenance, calm, nonchalant air and acrobatic gyrations were worthy of the highest praise. The musical part of the show was left largely to Bill Trethowan and Pam Waters, who acquitted themselves well. We understand that this is but the first of a series of new revues. We wish them luck.

A. G. C. C.

Pembury Letter

IF all the abuse of the E.M.S. so far published were collected in one book, it would constitute a fair-sized tome. The praise, on the other hand, could be written in a bold hand on the back of a postage stamp. We propose, therefore, to assess some of the advantages that have come to us as a result of the wartime scheme.

The benefits of a country life have come as second nature, and the pleasantness and co-operation of our colleagues have been stressed on many occasions. Beyond this, however, we feel that teaching has benefited considerably. Nobody can doubt that in pre-war days every branch of the Hospital suffered from a surfeit of students. Personally we have dealt with as many as thirty students on one firm, with the result that bedside teaching was available for an inner circle of ten. The only clinical phenomena the rest of the firm could observe were the ravages of the staphylococcus on the back of the neck immediately in front of him. He naturally soon tired of this and delivered himself forthwith into the hands of Morpheus, certain that the mass of human material all round would maintain him in the erect position. Now at Pembury, when one has collected one's firm, visitors and "free lances," the total does not exceed nine. We know each student by name, something of his capabilities, and he may even have become your personal friend. The round is conducted with an intimacy which is an essential to bedside teaching, and, what is more, everyone has a chance to examine the patient and elicit the physical signs for himself. In the Children's Department we have been able to take the students round the cases every morning, quite apart from the official teaching rounds. The result is that they know exactly what is happening in the treatment of all the cases, and are able to assist in the investigations to an extent never envisaged at Guy's. We believe the answer to "The Future of Clinical Teaching" is a return to the old system of small firms. We cannot always rise to a Regius Professor and his Assistant as full-time teachers of nine students; but we are in agreement with Professor Ryle's statement of fact. We believe the students at Pembury are also getting a "square deal," though on a humbler scale than those fortunate Cantabrians.

An event of considerable importance has been the birth at Pembury of a branch of the Guy's Hospital Physical Society. A very successful clinical meeting has been held, and the subsequent discussion was of a remarkable profundity. The insemination, gestation and delivery of this lusty infant is due entirely to Mr. R. C. Hallam, and we offer him our hearty congratulations.

In our last letter we mentioned that some of our remarks had raised but a solitary extra-systole. It now appears that the rhythm has changed to a definite fibrillation, and therefore at present we consider it politic to maintain a stony silence. However, should we survive the storm we hope to give you further news later, dear reader.

N. M. J.

Farnborough Letter

WORK at Farnborough has now settled down to a dull, monotonous routine, broken only by the occasional arrival of a convoy of twenty patients to go into two empty beds. Wards are filled to overflowing—so full, indeed, that even the Government beds, those engines of destruction, have been put into service. But we comfort ourselves in knowing that our chronics can in due course be sent to Orpington, and with the hope that our diagnoses will occasion as much amusement there as those of the convoy patients from Lewisham do here.

House officers come and go with startling rapidity—or at any rate sufficiently rapidly to throw into chaos our calling system of flashing lights. Knight and Willcox have left us for other hospitals, whilst Heap, Rawlings and Rowley have recently arrived. Kesson has been transferred here from Pembury, and Donald Leeming, after paying us another of his fleeting visits, has now departed once more.

The new buildings for maternity and children, now nearly completed, are to be opened shortly. We fear, however, that the extra beds thus gained in the old building will not be empty for long; the Relieving Officer should find no difficulty in filling them.

Social activities continue spasmodically; the latest edition of Farnborough Follies is in course of preparation and is occasioning much groan and travail from the performers.

Even such great ones as the Director-General of the E.M.S. have favoured us and the nurses' sleeping quarters with their presence. German measles also has descended like manna from Heaven on nurses desirous of a few days' holiday. We wish that we, too, could find an equally good reason for doing no work; instead we are smitten down by influenza and wish for death.

W. W. G.

Orpington Letter

THE events of the past fortnight have been completely overshadowed by the arrival of our pay cheques, an event for which we and our creditors had been waiting with growing concern. We thank our champions from the bottom of our pockets.

At the top of the new block of wards a hut of similar external design has been partitioned off into cubicles and will be used as an extension to the Nurses' Home. With two beds to a cubicle and only a curtain separating it from the passage the accommodation cannot be called luxurious, but should compare favourably with quarters we have read of in other sectors. They should soon now be ready, and we shall be glad to know that it is no longer necessary for nurses to be billeted outside the hospital. One billet at least we have heard was quite unsuitable, yet appeal to the proper authority brought no satisfaction.

We much regret the loss of two more house officers. R. G. Thomas has left, and our infirmary patients are again allowed to relapse into their customary stupor. Bowen Jones is leaving us for the senior service, and carries our good wishes with him. We are also very sorry to hear that Dr. Boland will not be with us much longer; we are going to miss his visits very much indeed. Van Steytler is our latest arrival, and we hope he will enjoy his time here.

G. L. L. R.

Joyce Green Letter

THERE have been more changes of personnel at Joyce Green, and we were sorry to bid farewell to Rowley, who has left us for Farnborough. We welcome Wilcox from Farnborough, Elliot, and also Dr. Brown, the new Superintendent of the Orchard, which he has aptly christened "Butlin's Camp"! The population of this Camp is gradually decreasing as there have been no admissions since the original evacuees at the beginning of the war. One hears rumours that it is going to be staffed by the L.C.C. and will no longer be under the E.M.S. Most of the inmates are chronic sick, but surely these patients who may have to spend the rest of their lives in hospital, are the very people who should be made as comfortable and bright as possible, instead of being nursed in wooden huts, dimly lit with gas light after the "black-out." There was, however, an evening of gaiety down at the Orchard last week, and the occasion was the Fancy Dress Dance. Most of the medical staff and many of the Sisters from Joyce Green attended, some of the latter as Will Hay and his boys.

There is very little news from Joyce Green. The patients and nursing staff were entertained one afternoon recently by a concert party from County Hall. We have been unable to obtain a report of this, but we expect the conjuror found no difficulty in producing large quantities of red tape from the top hat instead of the customary rabbit!

The slight outbreak of scarlet fever here seems to have abated, but Rubella is still claiming its victims. Your humble scribe has to-day been isolated because he has developed this unpatriotic disease.

L. G. S.

Correspondence

State Aid and Research

To the Editor of the GAZETTE

SIR,—At the end of the present war changes in medical institutions and medical education will be precipitated that would never have taken place in more normal times. If the best use is to be made of this opportunity to institute improvements, it is to be hoped that more or less informal discussions of problems and their solutions will continue to take place during the war period. Under the circumstances, therefore, it seems to me to be rather unfortunate that the ideas and contributions on these topics that have been fairly freely expressed in recent weeks in "Passim" should have been so uniformly negative

and sterile. Professor Ryle's recent article in the *Lancet* was not an attempt to portray any Utopia; it was a concrete proposal put forward as a basis for discussion, and it seems a pity that no effort was made to comment on it in a more constructive spirit.

There are two points raised by your criticism that I should like to comment upon: the question of State aid to the teaching hospitals, and the possible value to such a medical school as Guy's of whole-time members of the teaching staff in clinical subjects.

There is nothing new about State aid to university institutions in this country—indeed it began far back in the last century. It is true that Guy's was the last of the London Medical Schools to avail itself of such help, but it has now fallen into line with the rest, and no opinion has ever been expressed in my hearing that bureaucratic interference has hampered the initiative of the School. The reason undoubtedly is that the University Grants Committee which distributes the funds to academic institutions is itself primarily an academic body, as anyone can see who takes the trouble to look up its membership in Whittaker's Almanac or, better still, to consult the Committee's own Reports. Its stewardship of national funds in the past has been so admirable, and has inspired such confidence both at the Treasury, which finds the money, and among the universities, which receive it, that higher education in this country to-day would be very gravely handicapped without its mediation. Actually, Government officials are not unlike most other people—they do not want to incur more trouble and responsibility than they need. If the larger hospitals, and more particularly those to which teaching schools are attached, were to work out a scheme, designed in a broad way to meet the public interests, as the universities have done in the past, I feel sure that it would stand a very good chance of sympathetic consideration by the authorities in the period of post-war reconstruction. It would also probably have the additional advantage of being a better plan than any designed or imposed from without. But the initial move must come from the hospitals and medical schools if they are to get what they regard as the best solution, and it is for this reason that it is so desirable to have constructive ideas canvassed and discussed at *the present time*. At the end of the war, any plans will probably have to be carried into effect pretty quickly, and there will not then be time for any lengthy deliberations.

From reading your remarks about full-time members of the clinical staff, I feel that you, like many other people, are under a misapprehension as to what their duties should be, and I should like to take this opportunity to set out some of my own views on this subject—again naturally for discussion. What I believe to be the principal misconception arises from taking too narrow a view of the tasks and duties of a university in modern times. A university has two functions: to extend knowledge by teaching and to enlarge it by research. Both are equally important. That such is the view taken by London University can be seen from what they regard as a roughly reasonable allocation of time to the various aspects of university life by members of the full-time staff, viz., one-quarter to teaching, one-quarter to administrative matters both inside and outside the university, and one-half to keeping up with *and advancing* their subject. To consider full-time clinical appointments exclusively from the aspect of their relation to teaching is, therefore, to take too narrow a view—they must also be considered from the standpoint of their value in advancing medical knowledge.

Original work of the most valuable kind has been carried out in the past by members of the medical profession who have been actively engaged in practice, but at the present day, while the double duty of practice and teaching or of research and teaching is still fortunately within one man's powers, it is rarely that anyone can contribute effectively in all three directions. If none of these activities is to be relegated to a subordinate place in the School, therefore, it becomes necessary to take all three into consideration if a properly balanced medical school staff is to be obtained. In a medical school as large as Guy's, men of very varied interests can all find places. Further, since the time required for research is considerable, and the equipment and resources are unobtainable outside a hospital, it is more or less essential that the persons undertaking the combined tasks of teaching and research should be whole-time members of the staff like those in the non-clinical subjects.

Personally, from my experience of working in five large medical schools in this country and the United States, I am convinced that Guy's as a whole (and more particularly some of the younger men who are anxious to undertake research work in clinical subjects) would benefit greatly by such an evolutionary move as the appointment of one or more senior full-time clinicians with university rank. The days when research could profitably be restricted to examining patients in the wards has passed, and the recent rapid strides in the practice of medicine have been taken largely as the result of a happy combination of ward and laboratory work. A certain proportion of senior

men are required in every large London medical school who are equally at home in both.

Experience must be our main guide in such matters. All the other large medical schools in London have now tried the experiment of Medical Units for twenty years, and as all of them have by now appointed new directors on the retirement of old ones (at Bart.'s there have been four such directors) the system may be said to have been well tried and, presumably, to be functioning well. Finally, the question which I believe the opponents of the introduction of any whole-time members into the senior clinical staff will find it very difficult to answer satisfactorily, is how research in clinical medicine is to continue otherwise in London medical schools amidst the increasing stress and strain of practice. The international position of Guy's was gained by the great production of original work by members of its staff in the past, and it can only be sustained by comparable efforts in the future.

Yours, etc.,

G. PAYLING WRIGHT.

Department of Pathology,
Medical School,
Guy's Hospital, S.E.1.

The Emergency Bed Service

To the Editor of the GAZETTE

SIR,—While denying in paragraph 2 of "Passim," in your last issue, the charge of complacency levelled at you by Professor Ryle and Dr. F. G. Lloyd, you provide an unparalleled example of it in paragraph 3, in which you suggest that should the admission of cases be taken out of the house-officer's hands and put in the hands of the practitioner, who "is human and errs from time to time," teaching rounds will become a mockery and the base hospitals strained to breaking point. It has apparently not even crossed your mind that house-officers, particularly house-officers within six months of qualification, might also be human and err, let alone that they might err far more seriously and far more often than general practitioners of many years' standing.

In practically every other teaching hospital the admission of cases is in the hands of a higher authority than the house-officers, and the procedure at Guy's represents a privilege conferred on the house-officers by the Governors. Whether the Guy's arrangement is a good one, however, seems doubtful. It is bound to give rise to considerable inconvenience and not a little irritation for the practitioner who seeks the admission of one of his cases, and it was to diminish the period of delay in admission that the Emergency Bed Service was established. A doctor is assured o obtaining immediate admission of an urgent case through this organisation, which can work efficiently only if it is provided with a list of vacant beds from the hospitals on its panel. If a hospital having signified that it has vacant beds refuses to admit a case because, in the opinion of the house-officer, it is unsuitable, then the whole point of the organisation disappears.

Perhaps the greatest advantage to Guy's of the Emergency Medical Service is that it restores to some extent the competition with L.C.C. hospitals for interesting acute cases. When a doctor rings up an L.C.C. hospital, not only is he assured of the admission of his case, but the hospital offers to send one of their own ambulances for it. When the doctor rings up Guy's a common answer is, "Send the case up and we'll see if we think it suitable for admission," and a not infrequent result is that the case is returned to the doctor as unsuitable. This procedure has led many otherwise loyal old Guy's men to send their cases, whether good or bad, to L.C.C. hospitals or even to other teaching hospitals. Now that the doctor can get cases admitted through the Emergency Bed Service we at Guy's are given a chance of recapturing the type of case which we used to get before the L.C.C. simplified the mechanism of admission.

It sometimes happens that a case accepted through the Emergency Bed Service turns out to be anything but an emergency. This is not the fault of the Service, but of the doctor who sought the admission. Such cases should be reported to me *immediately* and in detail. I will then take the matter up with the secretary of the organisation, who will willingly investigate the circumstances and do his best to prevent their recurrence. In the past there has been a quite incomprehensible reluctance on the part of the house-officer to report these cases to the Superintendent's Office. He appears to prefer to grumble and grouse to his colleagues, and so give rise to the current, and quite unjustified, view that the Emergency Bed Service is an organisation designed to force the admission of "dud" cases; cases which any commonsense house-officer would have refused out of hand, if only he had been given the opportunity to submit the practitioner to a mild *viva voce* examination on the telephone.

In my view, the only occasions on which the take-in house-officer should reasonably refuse to admit a case when asked to do so by a practitioner or by the Emergency Bed Service are (1) when he has no vacant bed, or (2) when the case by reason of its infectious or septic nature, *e.g.*, a case of diphtheria or a septic abortion, might endanger

the other patients in the ward, or (3) if the patient is likely to cause such a disturbance in the ward that in normal times he would have been moved to the Strong Room. (At the present moment there is neither septic ward nor strong room with male attendants available.)

Even supposing a " dud " case is " swung " on the house-officer, he can discharge it the following day after the Registrar has taken the opportunity to teach the clerks why the diagnosis is incorrect.

Yours, etc.,

P. M. F. BISHOP,
Deputy Superintendent.

Guy's Hospital,
S.E.1.

Teaching and Parliament

To the Editor of the GAZETTE

SIR,—For your comfort let me tell you that ever since I have known Professor Ryle, and he was one of my students, he has been an Independent Progressive, with a hatred of self-complacency—in others as well as in himself. His description of the enviable lot of the nine ward clerks under his immediate care is not at all self-complacent. He is thinking only of what he would like to have done at Guy's, if he had not been so busy. He may, I think, be quite sure that the influence for good which he exercised daily upon generations of Guy's men, despite the rival claims of practice, was upon a scale altogether greater than that he now exerts upon these nine clerks in the tea-room.

With his main thesis that the longer and more intimate the contact with a first-rate teacher, the better it is for the student, no one will disagree. It is what the Regius Professor of Medicine calls his rejoinders that distress me. I trust I shall not appear to be making a rejoinder if I say that it is perhaps fortunate that our votes did not succeed in making him a Member of Parliament. Had they done so, he would surely have found his hopes of being able to devote a greater proprotion of time and energy to " The advancement of Teaching and Research " brought to nought, and perhaps have had to neglect the fortunate nine under a press of work greater even than that of a large practice.

Yours, etc.,

H. CHARLES CAMERON.

23, Devonshire Place,
Upper Wimpole Street,
W.1.

The Future of Clinical Teaching

To the Editor of the GAZETTE

SIR,—As a nurse I feel somewhat bold in entering into the discussion on the future of clinical teaching. Professor Ryle's article in the *Lancet* was brought to my notice, and I read it and the subsequent discussion and correspondence in that paper and the *Gazette* with great interest, having been a patient and an admirer of Professor Ryle for many years.

In my capacity as a teacher of nurses as well as a practical nurse, I should like to take the opportunity of making two points. First, and this was what really urged me to write this letter, a correspondent in the *Lancet* criticising Professor Ryle's article, said that alterations in the teaching such as those which were suggested would tend to " spoon-feed " the students and " put them on an escalator instead of a ladder " in order to reach their goal. In my experience, whenever there have been plans to improve the teaching of nurses, the immediate reaction from many quarters has been to say that nurses are being " spoon-fed." Surely no class of students has ever been less " spoon-fed " than nurses ; they have indeed in the past been " the pickers-up of learning's crumbs." However, my point is that to anyone who has studied the principles of education, good teaching and " spoon-feeding " are a contradiction in terms. Amongst other things good teaching means stimulating and guiding students to read and think for themselves, and to use their critical faculties intelligently on their work. I think, too, that the experienced teacher, rather than " spoon-feeding " students with more and more facts, presents much less textbook matter, and tries to teach first principles more thoroughly. More time is required to do this, and nurses have had in the past little opportunity to study properly the theory and practice of nursing.

Secondly, I would make a plea that the medical profession, in planning reorganisation and improvements in their own schemes of training, will give a thought to and a helping hand in the training of nurses. We thank Professor Ryle for realising how valuable ward teaching rounds for nurses by members of the medical staff would be.

When the time is again opportune for planning progress for the nursing profession, the help and understanding of the medical profession will be essential. Monetary grants are urgently needed to enable the training schools for nurses to be independent of the hospitals, and bursaries are required to enable many suitable candidates to enter for training. In a time of crisis like the present the services of nurses are amongst the

first to be called upon, and in time of peace many of the social services cannot be carried on without them. Surely the State should contribute something to their training.

Yours, etc.,
HILDA M. GRATION.
(*Sister Tutor.*)

Guy's Hospital,
S.E.1.

Hæmatology and Patience

To the Editor of the GAZETTE

SIR,—Your correspondent remarks with due emphasis upon the varied qualities which must be possessed by the erstwhile hæmatologist. He fails to mention one quality, however, which, to judge from the tenor of his article, he himself sadly lacks. I refer to that most elusive quality, patience.

This most unfortunate individual, casting aside the torpor which grips most individuals on a Sunday afternoon, decided there and then to do a blood count. The misfortunes which befell him were related with the object, no doubt, of remedying the defects of which he complains. I cannot help feeling, however, that if the writer had been more conversant with the workings of the new hæmatology department, he would not have been so hasty in setting forth his grievances before the readers of this journal.

The new Hæmatology Department was opened in the Bacteriology Department last September to take the place of the recently evacuated old Clinical Laboratory. A special room was set aside and fully equipped with those articles necessary for hæmatological investigations. Special stains and clean apparatus could be obtained from the Bacteriology Department at any time, and expert advice and assistance was always forthcoming from Dr. Knott and his assistants.

The laboratory was open at all times and was widely used. It now appears that the authorities have decided to restrict the use of this laboratory to week-days. This action has, no doubt, been prompted by the "disappearance" from the department of several counting chambers and many pipettes. While agreeing that such a state of affairs is intolerable, it is a great pity that the actions of one or two misguided individuals have hampered the work of the house-officers and students of this Hospital.

Yours, etc.,
"ANISOCYTOSIS."

Guy's Hospital,
S.E.1.

(This problem has been adequately dealt with by the reopening of part of the old Clinical Laboratory for use at week-ends.—ED.)

United Hospitals Magazine

To the Editor of the GAZETTE

SIR,—May I avail myself of the hospitality of your columns to call attention of your readers to certain points about the *United Hospitals Magazine*?

1. The object of this new journal is to be truly representative of medical students, newly-qualified men, and nurses associated with the London teaching hospitals. We are greatly indebted to several senior members of the profession for their kind encouragement and generous financial assistance in launching the first number. The magazine, however, is run entirely by "juniors." It is not run for profit, there are no paid officers, and it has no axe to grind, political or otherwise.

2. For the present it is proposed to publish two-monthly. The first issue appeared in January and was distributed as far as possible to all hospitals to which London medical students are attached. This issue was necessarily produced by a small group who were convinced there was a demand for a magazine of this sort, and who were prepared to take the risk and trouble of starting it. The magazine now has a staff consisting of an editor, sub-editor, business manager, secretary and editorial board consisting, to date, of representatives of all but four of the London teaching hospitals. The next issue will, we hope, really fulfil the object of the founders.

3. To this end we ask your readers to help us (and therefore themselves), particularly by making contributions to the magazine as representative as possible. (Of course we want people to buy the journal, but we hope the next issue will sell itself.) We shall be glad to receive any sort of writing in which medical students and nurses may indulge. Humour, of course, is especially welcome. Also criticism of the present number, ideas for future ones, and any items of interest—personal experiences of nurses and students, for instance. The Guy's Hospital representative is Mr. Humphrey Osmond, and contributions may be sent direct to him or to the Editor, 87, Great Titchfield Street, London, W.1.

We cannot emphasise too strongly that we are not competing in any way with existing hospital magazines. The majority of our editorial board are also editors of their respective hospital journals and will see to it that this policy is maintained. In producing an inter-hospital student magazine we feel we are fulfilling a real need, even more apparent and acute in these days of uncertainty and rapidly changing conditions. But to succeed is obviously impossible without the wholehearted co-operation of those for whom the magazine is

meant. Indeed, were it not forthcoming, we would be forced to reconsider whether we were right in thinking that students and nurses want and can maintain a paper produced by, and for, themselves, and linking hospital to hospital through the medium of student opinion.

Yours, etc.,
S. L. BINDERMAN,
Editor, U.H.M.

87, Great Titchfield Street,
W.1.

Complacency

To the Editor of the GAZETTE

SIR,—Will you permit me to quote from your Editorial of 24th February?

"We are grieved, therefore, about this complacency which again we are told, runs through our writings. . . .

"Perhaps the best answer to the charge of complacency is to be found in the recent issues of the *Gazette*. . . .

"The sole function of the Take-In H.S. and H.P. . . . has thus been arbitrarily abrogated from us, and assigned forthwith to the general practitioners.

". . . a survey of many cases thus admitted would convince the most critical that many practitioners are human and do err from time to time.

"We do not resent any change that is good, but we do feel that little if any advantage will accrue to our patients from this edict."

The poor G.P., we know, is human. But are we to infer that the Take-In H.S. is infallible?

Yours, etc.,
"1923."

Apologia Pro Barba Sua

The Extern with a beard, Sir, did not find
The verses in your last to be unkind;
But still, he'd like himself to justify
At Guy's, and so will thus reply.

We most have beards, Sir, most do shave them off,
Though some these days do sport a small moustache.
Shame on such cowards! He who will not dare
To go the whole hog should be forced to bear
A face all shaven, smooth as nurse's cheek.

To think of all the waste in one short week
Of time, hot water, soap, and steel for armaments.
It makes him shriek and cry out in defence
Of beards, and Sir, he makes no vain pretence
When claiming that a beard's not dirty.
No! the hygienists need not get shirty.
His comes up fresh and new as bridal lace
Each time he washes the External face.

However much the critics carp and pike it,
The mothers on the District truly like it.
As "the French Doctor" is he known to many,
And truly he does not think there are any
Who really think, or rather are afeard,
He'd swab their perinea with his beard.

As for "appearance" and the voice of "custom,"
He's quite prepared to meet them both—and bust 'em.

Now lastly, beards won admiration
From many of the great of this great nation.
Drake wore a beard, half red, half blue,
Raleigh and Sidney had them too.
Sir Samuel Wilks, of Guy's, ne'er shaved his face.
The Extern does not try himself to place
Beside these great ones—'twere to court disgrace.
Still, if a hirsute face did please these fathers,
Why should we all submit to barbers' lathers?

R. E. R.

(Satisfied.—ED.)

Notes on the Fitting of Artificial Limbs

(Suggested by a visit to Queen Mary's Hospital, Roehampton)

AN ideal stump for an adequate movement of the limb does not depend entirely on the great length of bone left and its leverage; the optimum length above the knee is ten to twelve inches from the greater trochanter. The skin which overlies the cut end of bone should have no muscle tissue underneath. The severed nerve should be shorter than the bone and should not be left so long as to cause a painful neuroma at its lower end. The best time to fit the prosthesis

is two and a half to three months after the operation, by which time the scar has healed, a good collateral circulation has been established, and the stump is in such a good condition that it can be handled without causing any discomfort. The sand-bag method for supporting the stump after amputation should not be used, as it fixes the stump in a position of partial flexion, which is inconvenient for subsequent manipulation and fitting. Massage is not necessary and may be harmful. When the limb has been worn for a few months, the stump shrinks, and a new socket is required. A provisional prosthesis such as plaster pylon is sometimes used before a permanent socket, in order to save expense. The use of the plaster pylon may, however, lead to the adoption of bad methods of walking.

The means of suspension of artificial limbs vary to some extent with the length of the stump. For the above-knee amputation the limb may be fixed by means of a pelvic belt or a shoulder suspender. The weight of the affected side during pelvic movement is transmitted from the ischial tuberosity to the medial edge of the socket.

In a stumpless case of disarticulated hip, a type called the " tilting table head " is designed with an automatic locking at the hip in extension after sitting; the socket that receives the hip should fit as comfortably as a glove. Whenever possible, disarticulation at the hip should be avoided, because limb-fitting is so much more satisfactory if the section can be made through or just below the trochanters. The transcondylar operation for conservation of as much as possible of the femur is not advisable. The full length of bone is of no practical advantage, and the bulbous end is awkward for fitting. As in the case of all long stumps, it is liable to subsequent circulatory disturbances. An amputation above the knee is preferable. In a case of amputation below the knee, six inches of the tibia should be left and five inches of the fibula, because if they are equally long a transverse ridge is formed terminally. The posterior skin flap should be the longer, as flaps of equal size give a scar which breaks down easily.

The knee joint is poly-centric in nature. The movement of " flexion " includes also some degree of sliding of the condyles of the femur on those of the tibia. Thus an ingenious method of making the movement as natural as possible, is to have two adjacent toothed ends strapped together by a pair of bars and screws, in order to avoid postural complications due to inequality of both knees.

An ideal stump for the attachment of an appliance to the upper extremity should be not more then $2\frac{1}{2}$ inches above the epicondyles of the humerus. Amputation through the elbow joint is disadvantageous because of the bulbous end of the humerus and the tendency to circulatory disturbance. In the forearm, two and a half inches above the styloid process of the radius is the best level; but if a higher cut has to be made, even three to four inches of radius and ulna are better than disarticulation at the elbow, as the insertions of powerful muscles are very helpful in movement. The scar should have equal anterior and posterior flaps. The prosthesis is suspended from the opposite shoulder.

An above-elbow fitting has an automatic elbow lock; the person flexes the elbow by abduction of his shoulder. The forearm is divided into two sections; the lower is rotatory and can be used for carrying a case or even holding a glass of water. It can be replaced by another section of paired hooks or clamps for holding a broom, brush, or shovel. A below-elbow amputee can perform all these actions with greater ease. He can, in addition, perform heavier work such as nailing and sawing, and the more delicate movements involved in the lighting of a cigarette.

S. M.

Sport

Rugby

Guy's v. Oxford University

(At Oxford on Wednesday, February 21st)

AFTER a most exciting game, full of thrills from start to finish, Guy's defeated Oxford University by 2 placed goals and a try (13 points) to 4 tries (12 points).

Although Guy's play Cambridge University twice every season, this was the first match with Oxford since 1925. Owing to the severe wintry weather which started in the middle of December, both sides had been without a game since, and it was an agreeable surprise to find the teams so well tuned for the occasion.

From Oxford's point of view it was a good trial for the team selected to play in the return unofficial 'Varsity match against Cambridge on the following Saturday, but unfortunately they badly missed the assistance of their Welsh centre, M. J. Davies.

On the other hand, Guy's lacked the services of J. G. Phillips, J. van A. Steytler and a good back forward in G. A. Albers; but in spite of the absence of these stalwarts, Guy's staged a magnificent display and won on their merits.

Babrow and Crawford were outstanding in the

back division, and Ebsworth, deputising for Phillips at fly-half, played a magnificent game, but the honours in this match go to the forwards, who had the advantage of the opposing pack both in the set and loose scrums. Osmond, assisted by his colleagues, got the better of Muller, and secured the ball in most of the tussles. On his display in this game alone he must be regarded as a serious candidate for international honours.

Guy's now possess one of the finest combinations in the country—certainly the best seen in London for years; the team-work, thanks to Louis Babrow, the captain, is a revelation, and with good reserves following, there is no doubt Guy's will be established as one of the leading sides in the country.

During the first half of the game, Oxford had many chances to score, but they failed to penetrate a rock defence set up by Babrow, Kynaston and Darke. Many good movements broke down owing to the centres inability to hold a light ball, and eventually the forwards took command and opened the scoring when Simpson grounded the ball for an unconverted try.

Guy's retaliated and, following a grand movement between the threes, Kynaston registered a great try and Mullins gave the Hospital the lead by kicking a fine goal.

Just before half-time Oxford regained the lead when Pearce crossed for a try which he was unable convert.

After the interval Guy's set a cracking pace, and in a short time their efforts were rewarded. Clever work by Ebsworth and Babrow enabled Crawford to score and once again Mullins obliged with the goal points with one of the best efforts of the match.

Crawford was playing a magnificent game, and Hollis, the Oxford captain, found it very difficult to operate as usual—Crawford was here, there and everywhere, and never allowed Hollis to move a yard, and yet he was always ready to finish off a Guy's attack with devastating results.

Having established the lead, Guy's played with confidence, and another magnificent effort by Babrow ended when Crawford showed a clever pair of heels to Hollis and crossed for another try, which was not converted.

In the closing stages Oxford rallied, and twice Pearce crossed the Hospital line, but on each occasion the place kick was too far out for him to convert.

Team.—T. L. T. Lewis; P. C. Gartell, L. Babrow (captain), R. U. F. Kynaston, J. P. Crawford; J. D. Ebsworth, W. J. Lewis; J. P. Rochford, H. F. Osmond, D. N. Fuller, J. R. D. Williams, J. C. Bulstrode, C. S. Darke, M. R. Mullins, T. W. Renton.

Hospital Information, etc.

Pass List

ROYAL COLLEGE OF PHYSICIANS.

M.R.C.P.

E. B. Reeve.

Papers by Guy's Men

Payne, W. W., and Another. Acute nephritis in childhood with special reference to the diagnosis of focal nephritis. *Quart. J. Med.*, 1940, ix, 37.

McArdle, Brian. The serum choline esterase in jaundice and diseases of the liver. *Ibid.*, 107.

Changes of Address

Wm. E. W. Bridger, M.B., B.S., Dunster House, Parkhill Road, Bexley, Kent.

J. F. Buckmaster, Flying Officer, R.A.F., Halton House, Aylesbury, Bucks.

H. G. Close M.D., Blood Supply Depot, Old Bute Hospital, Luton, Beds.

J. C. C. Howe, Major, R.A.M.C., O.C. No. 7 Ambulance, Netley, Hants.

Maurice E. Shaw, M.D., 14, Upper Harley Street, N.W.1. *Welbeck* 4824.

L. J. Wallace, Flying Officer, R.A.F. (V.R.), 4 Abele House, Lower Hill Road, Epsom.

Marriages

BRIDGER—MARSHALL.—At Eltham Parish Church on January 6th, 1940, Wm. Ed. W. Bridger to Elsie Ada Marshall.

PEARCE—HENDERSON—On the 5th March, 1940, by the Rev. R. T. Cameron, at Aberdeen, Reginald Herbert Frederick Pearce, L.D.S.(Eng.), Lieut. A.D. Corps, only son of Mr. and Mrs. Herbert H. Pearce, of Farnborough, Hants, to Margaret Jean only daughter of Mr. and Mrs. Garnet D. Henderson of Aberdeen.

Births

THURSTON.—On February 22nd, 1940, at 19, Bentinck Street, W.1, to Ione (née Barber), wife of Lieut. Gavin L. B. Thurston, R.A.M.C.—a daughter.

BARRACLOUGH.—On March 3rd, 1940, at the Mornington Nursing Home, Bradford, to Winifred (née Moulton), wife of Charles B. Barraclough—a daughter.

Death

GWYNN.—On February 22nd, 1940, Colonel William Purnell Gwynn, C.M.G., late R.A.M.C., at Rotherfield Garden Avenue, Bexhill.

PRICE.—On 4th March, 1940, at 12 Station Road, Orpington, Charles Edwin Price, M.R.C.S., L.R.C.P., passed peacefully away after a long and weary illness most patiently borne.

EDS. { H.F.L. / N.A.N.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

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PASSIM

OUR visits to the Zoological Gardens have often caused us to admire the versatility of that little creature the chameleon. He demonstrates a wonderful adaptation to his environment which causes us to envy his performance. Whereas adaptation is a feature of all biological processes, we find that Man is losing this power when, as one of a community, he is faced with the changing fortunes of a strange and insidious war. He is imbued with a desire to return to normal, though the prospect daily becomes more threatening. The war grows more extensive, more involved, as another democracy yields her strongholds to the aggressor.

Our widespread and successful evacuation in September demonstrated that we were able to adapt ourselves to the dangers which were then imminent. After six months of comparative quiet, we feel it is time to take stock of our position both as regards our Hospital and the teaching of her students.

There is much to be said for the maintenance of the present layout of the Sector if only internal difficulties can be minimised. This problem of the three-sided organisation is one which we believe will be solved as the truth comes to light, and as facts are accepted and not repressed. The principle of evacuation of casualties away from danger areas is a sound one. We must remember Dr. Trueta's observation, however, that in Spain medical equipment and personnel were lost mostly in the country hospitals, because they were undefended and presented an easy target for the enemy's bombs. At the same time, if we have successive air-raids, transport to the Base Hospitals will be seriously impeded and may become impossible. Despite these disadvantages, it is clear that the system will be necessary in order to provide sufficient accommodation for the casualties we expect.

From the point of view of the teaching of students, evacuation has proved a mixed blessing. From the Medical School, reports have been mostly favourable. Students have been able to enjoy some of the advantages of a residential university. They have spent more time at their studies, having been spared the daily rush-hour scramble. On the other hand, billeting has sometimes been primitive, life has become more expensive, and they miss the Library and Museum. Tradition or no tradition, they are sorry not to be working in the precincts of the old Hospital, despite all its defects and shortcomings. It is moving to see the emotional disturbance evoked when someone now at Guy's receives directions to leave these sacred parts. It is moving also to watch the joy which accompanies their return. We are becoming sentimental; we are admitting that the Hospital has a tradition, or something which attracts and holds its members. But such is the truth.

Clinical teaching in the Sector has been benefited by the war, although the sudden disappearance of several of our teachers into the Services will be difficult to overcome. Students at Guy's are able to see a large turnover of cases. At the bases, clinical material is often more than can be readily covered, and teaching is conducted on a more personal note.

Alas, the struggle to maintain the present system seems to have been in vain. We hear rumours that both the Medical and Dental Schools may return to London. We publish a letter from a Dental Correspondent who writes to deplore this fact. The matter is largely a personal one, depending on whether a student prefers the town or the country. Might we make a plea that students are given a chance to state their preference? Those who remained in the country would keep

the organisation alive and ready for the time when air-raids demand a re-evacuation from London.

We have considered the problem in respect to our own Hospital and Medical Schools, but the same decisions as to the best future attitude towards evacuation have to be made throughout the country. Even if, for the sake of convenience, we endeavour to return to normal, should we not also take care to keep open the way back to a state of preparedness? This means a compromise. The Englishman always loved a compromise.

▭

NEWS has at last reached us that the new Squash Courts and Gymnasium are nearing completion and will be ready for use within a few weeks. The *Gazette* Committee recently agreed to contribute two hundred pounds at the request of the Clubs' Union in order to ensure that this work is completed.

WE regret to announce the death of two old Guy's men. Dr. John Biggs, O.B.E., M.R.C.S., J.P., died at Cheltenham on February 2nd in his seventy-third year. He had worked in local government service in Cardiff since 1921 and had been Lord Mayor in 1922-23. Dr. Alfred George Wells, M.R.C.S., died on February 13th at the age of eighty-six. At the time of his death he was President of the Association of Public Vaccinators of England and Wales.

▭

IN time of War, contributions to *The Gazette* are apt to be slow in completion. The Editors are keen to maintain the former high standard of its clinical articles, and would be pleased to receive any such articles for publication. We are sure our Readers would also be interested to hear of the experiences of members of the Services who might give us an account of the work they are doing as far as the blue pencil will allow them.

This Medicine

" *Camphora Monobromata* exists in long acicular crystals in which bromine replaces an atom of the hydrogen of camphor. In large doses it produces great muscular prostration, convulsions, reduction of temperature and pulse, slowing of the respiration, coma and death. The drawbacks to its use are its unpleasant smell and taste, its irritative effect upon the stomach, and the local irritation following after hypodermic injection."

(*Extract from Textbook on Materia Medica.*)

Indian Sub-Assistant Surgeon to Visiting M.O.—" Sir, the patient is semi-unconscious."

Good Doctoring.—A South London schoolmaster asked his class to write an essay on " False Doctrine." One boy wrote : " False Doctoring means being given the wrong medicine. This doesn't happen at Guy's Hospital where my mum is now, because the police go there too and everybody knows it's a good place."

(*A South London Newspaper.*)

Orpington as a base
Has, I suppose, its place ;
But why so many ladies with lamps
Just to give enemas to tramps ?

(*A Thought from the R.A.F.*)

First-Aid Aspirant, fetching wet plates from the X-ray Department—" Have you got a pair of legs here by the name of Green ? "

Ladies' Maids and Maids.—Maid-attendant, kind, strong, domesticated, for tall girl, 16, drain damaged at birth : £52, age, religion, references.

(*The Times—advertisement.*)

The prize of five shillings has been awarded to Surgeon-Lt. H. D. Lamb, R.N.V.R., of H.M.S. *Montrose*, c/o G.P.O., London, for submitting the first entry.

The Great Libel Case

(*Reprinted from* " *The Gazette*," *August*, 1905)

IN our medical history the year 1828 is memorable for many things. A mere glance through the professional journals of that date is sufficient to see that. The Edinburgh tragedy of the body snatcher, Burke, which led to the Parliamentary Commission, and subsequently to the Anatomy Acts, ran that year ; the establishment of many medical societies dates from then. To us Guy's men, not the least memorable event is the great libel case of Cooper versus Wakley.

In the *Lancet* office, in the Strand, stands the bust of Thomas Wakley, reformer, philanthropist,

and journalist, and surgeon also. One has but to look at it to see what manner of man he was; a strong individuality, physically and morally, Quixotic, perhaps, as most reformers are, running full tilt against what he conceived to be abuses, a radical of the radicals, the friend of Cobbett, the sworn foe of the "unholy system of nepotism and hole-and-corner regime" at Guy's. Now-a-days we can look back with equanimity on what he said and wrote about us. The abuses are there no longer. The firm of Cooper, Key, and Cooper, general manager Benjamin Harrison, no longer exists, and with the impartiality that belongs to the historian we calmly review the great libel case, without running the risk of being struck off the roll of perpetual students of Guy's for having dared to do so.

On the 12th of December, 1828, in the Court of King's Bench at Westminster Hall Lord Chief Justice Tenterden, with a special jury, sat to hear the famous case. The contemporary journals give us glimpses of the state of excitement which prevailed. Judge and jury had to fight their way into court, the latter plaintively clamouring for armed assistance to keep the crowd back. Full prominence had been given to the issues. There had even been a question of a personal encounter between the parties, for the ancient absurdity of arbitrament by pistols was not yet extinct. Consequently the court was crowded, and it is on record that half the medical men of London neglected their patients that morning to attend the trial. On the bench beside his lordship were the Governors of Guy's, except their president, Mr. Thornton, who had querulously refused to attend on the ground that "Harrison manages all these things." There was Sir Astley himself, Brodie and Green of St. Thomas's, Ashton Key, Callaway, and a score of others, the body of the hall being filled with students and practitioners "who had struggled in, to the indignation of respectable people." On the counsel bench was Wakley, supported by his counsel, Pollock, afterwards Sir Jonathan Pollock, the poor Cambridge student, who was destined to become one of the great lawyers of the English bar, and Brougham, of whom legal history has nothing particular to relate. Wakley had decided to conduct his own case, and they had therefore nothing to do, and as events proved he had little to learn from them. On the other side sat the plaintiff, Bransby Cooper, with the handsome Sir James Scarlett, the first lawyer of the day, afterwards Baron Abinger, a man who had thrown up his brief for the defence of Queen Caroline, and who was supposed to have Lord Tenterden with him in every case, and to have a more lucrative practice than the great Sir Astley himself. His junior was young Kelly, later on to be remembered for his brilliant defence of the poisoner Tavell, and for his skilled handling of the Orsini case, a rising young lawyer who at that time already made his ten thousand a year.

The action was brought by Bransby Cooper, who had succeeded his uncle as surgeon at Guy's, against Wakley, the editor of the recently started *Lancet*, for a libel published in that journal. Reading it now, one is surprised that so gentlemanly a man as Wakley ever printed such an article as that complained of, but in view of the fact that at that time professional journalism was not so fine-mouthed as now-a-days, one can easily imagine how it came to be set up for the *Lancet*. It was a report of an operation at Guy's, a lithotomy performed by Bransby Cooper, and performed in a manner that the reporter thought fit to describe in a semi-comic way. Here is an extract:—

"Act I. The patient, a labouring man from the county of Surrey, thick set, ruddy and healthy in appearance, 53 years of age, was placed on the operating table a few minutes past one o'clock on Thursday. The ceremony of binding the patient we need not detail. The straight staff was introduced and held by Mr. Callaway. The first incision appeared to be well and fairly made, and after a little dissection the point of the knife was fixed (apparently) in the groove of the staff and carried onwards somewhere. A small quantity of fluid followed the withdrawal of the knife, and for some time the forceps were attempted to be introduced, but without effect. 'I must enlarge the opening, said the operator, 'give me my uncle's knife.' This instrument was given and a cut made with it without introducing the staff. The forceps were used with a great amount of force, but again unsuccessfully. 'It's a very deep perinæum,' exclaimed the operator, 'I cannot reach the bladder with my finger.' . . . .

"Act II. Staff reintroduced and gorget passed along it—various forceps employed—a blunt gorget—sounds and staves. 'I really can't conceive the difficulty—hush, hush, don't you hear the stone? Dodd (turning to a demonstrator), have you a long finger? Give me another instrument. Good God, I can hear the stone, but when I pass the forceps they won't touch it. Oh dear, oh dear.' . . . . Such were the hurried exclamations of the operator. Every now and then there was a cry of 'Hush,' which was succeeded by the stillness of death, broken only by the horrible squash, squash, of the forceps in the perinæum, and the 'Oh, let it go—oh, keep it in,' of the poor man. This act lasted upwards of half-

an-hour. . . . The man was finally put to bed, much exhausted. He passed a restless night, in great pain, and died 29 hours after the operation."

This astonishing article had been followed up by Wakley with a leader, in which he specifically accused Cooper of incompetence, and demanded that the public had a right to expect that the surgeons of a great public institution like Guy's should be competent men. Moreover, he had permitted a rather scurrilous epigram "On a patient who suddenly decamped from Guy's to St. Thomas'" to appear in his paper:

When Cooper's nevey cut for stone
His toils were long and heavy:
His patient quicker parts has shown,
He soon cut Cooper's nevey.

A couplet which appeared to give the plaintiff more indignation than the whole libel itself. For all this Bransby claimed £2,000 damages. In reply Wakley justified himself on the ground that it was a bona fide report, printed in the public interest, and also that the allegations were true.

After a preliminary argument on legal points with Sir James, in which Wakley showed that he was a match for the learned K.C., the defendant commenced his case. He called Dr. Partridge, F.R.C.S., who had been present at the operation, and who declared that "he would be hanged if he knew" why the operation was so much muddled. It had taken nearly an hour, whereas the average time for its performance should have been five minutes. Under cross-examination the witness declared that the stone, even in an empty bladder, might have been fixed above the pubes, a reply which confused Lord Tenterden for some time, who wanted to know "how on earth it was that it had not dropped down?" Next came an interesting young man, Clapham, L.S.A., who stated that he had only seen half a dozen operations in his life, and only one lithotomy, the case in question. He declared that there were about 200 students present at the operation. Under cross-examination Sir James drew from him the fact that he was not yet twenty-one, and that he had given a false certificate in order to get his diploma. Mr. Gilbert, M.R.C.S., the next witness, had only been present for thirty-five minutes. Then the yells of the poor patient had so upset him that he had incontinently fled. He considered that the operation had been atrociously badly performed: had seen it done under a minute. Mr. Thomas "Demonstrator of Anatomy at Deans School in the Borough," was of the same opinion. He did not consider Cooper an able surgeon. Questioned by Sir James, he said he thought tying the subclavian artery rather a "stiffish" operation: would not go so far as to say that the man who did it was necessarily a good surgeon. Any man might be able to tie the subclavian by accident. James Lambert, M.R.C.S., of three years' standing, who had written the original report, gave evidence in extenso, considerably confusing poor Lord Tenterden by his wealth of anatomical detail. He thought himself a better surgeon than Cooper—certainly: had no malice against Cooper: admitted that Cooper had once ordered him out of the hall at a Guy's dinner because he had refused to drink the health of the Council of the Royal College. Finally came Harrison, an unwilling witness, from whom Wakley extracted the fact that Cooper had no testimonials, as it was never the practice of Guy's to demand such. They elected their surgeons from personal knowledge. Sir Astley had nothing to do with the appointment. This closed the case for the defence. For the plaintiff, Sir James commenced with an able speech in which he amused the jury and put his lordship, already considerably ruffled by Wakley's rather insistent leading questions, in a good humour by relating the story of the clergyman who, wanting to preach against topknots, cast about him for an appropriate text and finally took, the sentence "Let him who is on the house-top not come down," making it into the simple command "Top-not come down." He called Callaway, who gave more anatomy, interlarded with a large amount of personal remarks. Callaway was very decided. Denied a stone could be encysted; might be lying loose in a fold of mucous membrane; certainly no man could tie the subclavian by accident—rubbish, whatever anyone else might say. Then Ashton Key, who was equally positive that a stone could not be encysted, nor could it be attached. It might be covered by a fold of the bladder—had himself written a book on lithotomy, and was an authority on the subject. Cross-examined: When he had published the book he had only performed three operations; considered Cooper a scientific surgeon; a man could not be a good surgeon without being scientific; if a surgeon had good reason for what he did, witness would consider him scientific; did not think the operation was so very tedious; had seen Cline do it in an hour and forty minutes, and fail to extract the stone; had seen Sir Astley mess about with a small stone for more than an hour; did not think either case proved incompetence on part of operator. Next Dr. Hodgkin, the Quaker professor of morbid anatomy at Guy's, who was grave, reverential and contradictory; then John Hilton, describing himself as a pupil at Guy's, who gave evidence as to the first incision having penetrated into the bladder, and lastly, Sir Astley.

The great surgeon was very respectfully handled by the court, and Mr. Wakley's cross-questioning was gentlemanly in the extreme. Nevertheless, it proved interesting enough. He made a point of it, he said, of telling his pupils of failures and difficult cases; he thought it the best way to teach them how to act under difficulties. Had seen the bladder very often; thought a stone might well be nipped by the mucous membrane; time was no criterion at all of the excellence of an operation; had done a lithotomy in fifty seconds, and another in more than hour; the first case was child's play, the second, he thought, was a difficu.t case. Under cross-examination, did not recollect having told his class that a man to become a great surgeon, had, like a great general, to wade up to his neck in blood; did not think his nephew a perfectly good surgeon; he was too young yet, but give him time, don't hurry him, and he would turn out all right; yes, he had read bits of Celsus, but not much; did not know that it was a frequent continental practice, when a stone could not be felt after the first incision, to send the patient back to bed; thought such a practice the reverse of good: why? Lord bless you, how would his lordship like to be sent back to bed with a gash in his lordship's perinæum, to have all that repeated the next morning?

It would take too long to follow Mr. Wakley's able speech, or Sir James' equally able reply. Lord Tenterden, who by that time must have had a fairly good idea of the general anatomy of the pelvic viscera—the preparation of the deceased having been brought into court to mystify him still more—summed up very impartially, putting it to the jury that the point at issue was whether the defendant had proved that Cooper had acted incompetently, and if not, how much Cooper had been damaged by the statements made. The jury, after a consultation, returned in favour of the plaintiff, with £100 damages.

Thus ended the libel case. Its echoes lingered for a long time. Wakley, it is safe to say, had public opinion on his side. He was given a complimentary dinner, in which it is worthy to notice many professional men took part, and he lived to see the reforms which he had advocated carried out at Guy's. Lambert, the reporter, was expelled from his medical society for "unprofessional conduct," and it is not on record what became of him, though it seems that he took little notice of the expulsion, but carried on his practice and again contributed to the *Lancet*. For a series of years that publication was boycotted at Guy's, but with the retirement of the Treasurer, Harrison, the interdict against it was removed, and it once more circulated within the hospital. With the other actors of the play we have nothing to do. Lord Tenterden died two years later, in harness to the last, muttering as he expired, "Gentlemen of the jury, you are all dismissed." It was his last great trial, and judging by his perplexed remarks, faithfully reported by Mr. Gurney in the shorthand report of the trial which is on record, by no means the least difficult case that he had to deal with.

The Trap

You will sit in the Trap three mornings a week,
And listen to long tales of woe,
Of pains some rheumatic and others sciatic;
Take heart, you new O.P.O.

They come in their hundreds, they've done so for years,
For bottles of Mist. Sennæ Co.;
And if you refuse 'em, you may even lose 'em,
And also your job, O.P.O.

You'll hear plenty of symptoms, but very few signs,
And neurasthenics will be your worst foe;
But if you're in doubt, don't say that there's nowt—
Take care, you new O.P.O.

After ten-thirty no others may come,
And all late patients must go.
In face of excuses prolific, and some scientific,
Be stern, you new O.P.O.

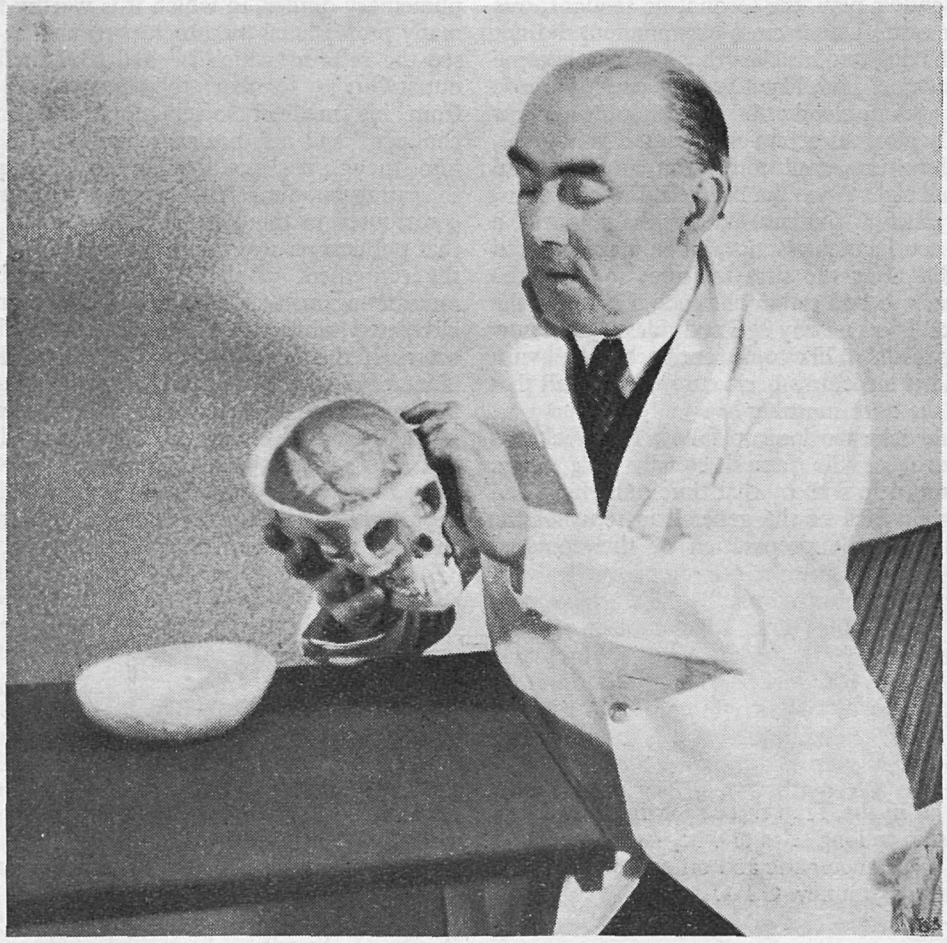
As the clock strikes eleven and you're getting on edge,
Just rest for five minutes or so.
Go for a stroll, have a smoke, crack a joke;
How's the temper now, O.P.O.?

Don't be upset if you end rather late,
You'll enjoy the appointment I know;
Relax with a friend in the Park, after dark.
Good luck to you, new O.P.O.

W. B. D. M.

"Broadway"

MR. FREDERICK BROADWAY was born in 1890 at Oxford. In 1914 he joined up with the R.A.M.C. and during the war he served in France as P.M., Theatre, and Nursing Orderly in several base hospitals and field ambulances. In 1920 he was demobilised and obtained a post as P.M. attendant to the Ministry of Pensions. He was engaged by Prof. Johnston in 1922 as assistant to Mr. Hancock in order to prepare for the transfer of the Anatomy Department from its old site (where Nuffield House now stands) to the Medical School. Since 1923, Broadway has prepared almost one thousand subjects for dissection, and has aided and equipped about one thousand five hundred students in their anatomical studies. Many of us will remember the friendly way in which he introduced us, at first somewhat overcome by the strangeness of the Dissecting Room, to the Dean for our "part," and then how he led us to the still form beneath the tarpaulins and introduced us to the "part" with a kindly slap of the hand. During the whole of his time at Guy's, Broadway has never had one day's sick leave, so that the vats in "Hades" must have some health-giving properties which have yet to be discovered.



"BROADWAY"

Upon the outbreak of war in September, 1939, the Anatomical Committee decided to form a "pool" for the reception and preparation of anatomical subjects for distribution to the evacuated medical schools. The centre was

established at Guy's because of the excellent accommodation available, and Broadway was appointed to be in charge of this work. He has since sent subjects in sealed containers to all parts of the country, including Glasgow, Cardiff, Sheffield, Cambridge, Pembury and Oxford.

Broadway is well known as a cricketer and has been the captain of the Guy's Employees' XI for several years. In one notable and successful match he carried his bat through the innings, scoring seventy-three not out, out of a total score of seventy-six.

A Word of Praise and a Little Grumble

Received from a Patient in the Wards

SUCH patience, energy and skill,
All given with so much good will,
You cannot realise, unless you see,
Sisters, nurses, patients, all one great family.
Or, at least, that is how it strikes me.
If only the outside world could get a peep
How Guy's works, while London sleeps.

Though I should not grumble at all,
Just why are your lights so bad?
And print is usually so small,
The strain to read just makes me mad.
But still, God bless you all.
Thanks for those peaceful, healing days;
Thanks for your tender, loving ways.
This is not flattery, but genuine praise.
God bless you all. M. B.

The Romance of Dentistry

A Paper read before the Dental Society by J. R. Ratcliffe

GENTLEMEN,—Have you ever been asked who invented the dental drill or whether fillings were done in ancient Egypt? Even if you have not, let us suppose that some day you are asked such questions by a patient who thinks that you know everything about your profession. Would you say, "Open wide," or, "I think we'd better have a rubber dam on that tooth," fervently hoping the patient will forget the question just raised? Or would you be able to give an interesting answer, such as, "Oh, yes! Mrs. So-and-so, the dental engine originated soon after the sewing machine about the middle of the nineteenth century, and was patented by a Dr. Morrison who had evolved the idea from the Singer sewing machine." Or, "No, Mr. So-and-so, as far as is known, the ancient Egyptians didn't have any fillings (except when they were made into mummies).

I propose to relate the story of the history of dentistry, which probably began at the beginning of all time, and has now reached a stage demanding a high degree of technical exactitude taking five years to acquire, at the end of which we can boast of being almost indispensable to mankind.

Let us start about 37 centuries B.C. when a certain Egyptian manuscript, known as the Ebers Papyrus, was written referring to "Maladies of the Gums, Blisters (abcesses) and Gnawing Teeth." Decay of human teeth from ancient times has been found in so many places that it is unlikely that there was ever a time when the human species was not cursed with tooth-ache. The next mention of dentistry in manuscript form is made one thousand years later by the Chinese who mention dental diseases and give prescriptions; one of the latter, for example, consisting of puncturing the poor patient's body in any one of twenty places to let out the evil humours.

Near the Biblical city of Nineveh some tablets were found by Professor Olmstead on which were written the experiences of a King's Physician. It seems that his life would be brought to a swift termination if he could not cure his patient, and his prescription was as follows: "The burning which burns his head, his hands, and his feet, would be relieved by the extraction of the tooth." There seems to be no doubt that he was well ahead of his time. But apparently this advice did not cure His Majesty, since, in another tablet the doctor suggests that the month was probably not propitious for the cure. This is an early example of superstition which struck the world, and indeed was still prevalent up to the end of the last century. Man has gone to great lengths to cure the scourge of tooth-ache, the most intriguing and fantastic methods being that of magic. The Sun, the Moon, in fact, the whole constellation of the heavens have been used in turn to provide some miraculous cure. The mythical sun-god Apollo was made a god of healing, and was supposed to be the son of Æsculapius, the God of Medicine. A mouse seemed in some way to be under the protection of the sun, and an antidote against death. Hence a popular cure for tooth-ache in the time of the Egyptians was to split the body of a mouse and

apply it, whilst still warm to the gums over the offending tooth. The Greeks give a prescription for halitosis which runs as follows : " The head of a hare, three mice, from one of which the intestines have been removed, but not the liver nor the kidney ; these to be burned separately, the ashes triturated with an equal amount of marble dust mixed with water." The peasants of Lebanon made things simpler by just throwing their teeth when shed against the sun, exclaiming : " Sun ! Sun ! Take the ass-tooth and give me a deer-tooth." The Maori natives of New Zealand used the following charm to hasten the eruption of teeth :—

" Sprouting seed, sprout,
Sprout, that you come
To see the moon, now full.
Come you sprouting seed,
Let the teeth of the man
Be given to the rat,
And the rat's tooth
To the man."

We meet the moon again in the following verse :—

" Dear Moon, I complain to thee,
Tooth-ache and bad demons torture me.
Take from me, take to thee."

Coming down to earthly things, the worm was considered to be the cause of tooth-ache. He was described as being a little white fellow with a black spot on his head. The Chinese claim some manuscripts of theirs to have been written at least three thousand five hundred years ago. They must have indeed reached a high degree of civilisation at that time, because their physicians recommended several prescriptions for tooth-ache and inflamed gums, such as saltpetre and garlic made into pills. They erred a little in their application by stating that these pills must be inserted into the ear of the affected side, and they erred still further by suggesting as a mouth-wash the urine of a child, the age limit or sex not being stipulated. They were not far off the mark, however, when they used arsenic for curing tooth-ache, although oblivious to the danger of necrosis of the jaws.

Extraction of teeth was performed by knocking them out with a hard wooden peg at this time, an effective if primitive method.

It may be news to some of us that we have a patron saint, St. Appolonia, and she was the basis of many strange superstitions. Hers is a story of martyrdom, for the story runs that in the year A.D. 241, in the city of Alexandria, she was imprisoned for being a Christian. Her teeth were broken with sharp iron points and the roots extracted with tongs, and during her agonies she prayed to the Lord that any person suffering from tooth-ache who would invoke Him in her name would be relieved immediately. This encouraged the ancients to break out in verse again :—

" Appolonia ! Appolonia !
Holy Saint in Heaven,
See my pain in yourself,
Free me from evil pain,
For my tooth-ache may torture me to death."

This was supposed to be especially effective if roared by the anguished patient on her day, 9th February.

At about this time, the tooth was given a more important position than it had ever held before. This was probably because the teeth persisted long after the organs and the bones of buried bodies disappeared. Necklaces of teeth were made and are still worn by the chiefs of some primitive tribes. The famous tooth enshrined and worshipped on the island of Ceylon is a cuspid probably snatched from the ashes of Buddha after his cremation. In A.D. 311 it was brought to Ceylon, where there is still a religious ceremony in August of year. The teeth of almost every known creature were said at one time or another to possess miraculous power. A mad dog's tooth was protection against hydrophobia ; the teeth of a dead fox were believed to be effective against sleep-walking ; those of tigers against whooping-cough ; and the use of a youngster's first shed tooth for the relief of uterine pains. Premature teeth were regarded as curses, however. In some parts of Africa a baby born with teeth is drowned at once, even in the present day. To counterbalance this, in ancient Rome such a phenomenon was so rare that the child was given a name such as Dentatus, which, during his life, would serve as a reminder of this abnormality. There is a reference to this type of abnormality in Shakespeare's Henry VI :

"The mid-wife wondered and the woman cried :
' Oh ! Jesus bless us, he is born with teeth,'
And so I was ; which plainly signified
That I should snarl and bite and play the dog."

Weird remedies are recorded for easing the trying time most children have during teething : the blood from the comb of the black cock, or the tail of a white cat, brains of a hare, paws of a toad applied to the gums. Babies in ancient Rome were fed on house-mice to relieve them of the pain during teething. The forms and the positions of the teeth are still regarded by some as having some specific omen in the life of the individual. The person whose teeth are far apart is destined to travel far. In Switzerland a wide space between the central incisors denotes that the child will become a great singer. In fact, a new science was

created at one time by a Frenchman which he called "Odontological Physiognomy." He claimed to tell a person's fortune from their teeth. As a matter of interest Samson in his book, "The Immortal Tooth," attributes the phrase "Odontological Physiognomy" to the inventive genius of some American historian.

These strange beliefs and superstitions have given way in the modern world to something realistic and tangible. Criminals have been brought to justice by the study of their teeth or those of their murdered victims. Perhaps the most topical and interesting is the Ruxton murder trial at Lancaster in 1935. Teeth are not easily destroyed, and therefore give the most valuable clue to identification. As you probably know, the bodies of the two victims were dismembered, and some teeth were extracted after death. From the evidence of Dr. Hutchinson and some others it was found that the jaws of head No. 1 had lost eight teeth by old extraction, and that they included the four which Mary Rogerson was known to have had extracted in 1932. The jaws of head No. 2 had lost 15 teeth by old extraction, and they included the four which Mrs. Ruxton was known to have lost. All four of these teeth were present in the jaws of head No. 1. These two facts, together with the construction of an artificial denture to fill the gap and to restore as far as possible the natural appearance of the mouth during life helped to solve the Ruxton murder case.

The following appeared in the "Daily Sketch" of 28th February, 1938 :—

> A dentist giving evidence at Bristol yesterday was asked to identify the young woman in the dock as the person alleged to have stolen £11 from him. "I could if I am allowed to glance at her teeth," he said. "Never in my professional career have I seen two teeth like those I saw in the mouth of the woman who visited me." Stepping from the witness box he examined the accused woman's teeth with a dental mirror. "This is the woman who called at my surgery," he said. The woman, Rosina Stokes, of Grindell Field, St. George, Bristol, was also accused of stealing 2s. from another dentist, was remanded till March 28th.

To resume after this slight digression, it was left to the Greeks in about 500 B.C. to attain any of the dental acumen that we know to-day, most of which can be credited to that great philosopher, Hippocrates. His prescription for halitosis could well be substituted for some of the advertisements which we know so well in the papers of to-day. He advocated :—"Oil of Anise Seed and Myrrh, 2 obloes (1½ gm.); each substance immersed in half a coytle (about ⅛ litre) of white wine, to be taken as mouth wash."

This great man attributed tooth-ache to natural causes instead of the mythical evil spirits. He gives descriptions of how to set broken jaws, and how to hold loose teeth with gold wire or ribbon. About 130 years later Aristotle mentions dental forceps, and says that dental caries is due to small particles of figs and soft sweets, which adhere between the teeth, where they very easily become the cause of putrefactive processes. It is curious to relate that no record was made of actual fillings or restorations being done. A thing that we do know is that the Greeks were not the first to manufacture a crude sort of gold bridge denture. There is a specimen, which is said to be the oldest in the world, of false teeth fastened in with gold wire which was found at Sidon Phœnecia, and is probably 3,400 years old. In Italian museums there are many interesting specimens of gold crowns and bridges made by the Etruscans who flourished in central Italy from about 1000 B.C. to 400 B.C. There is also an ingenious device made about 2,500 years ago consisting of several gold bands fastened to the natural teeth and supporting three artificial teeth, two of which were made from one calf's tooth cleverly grooved in the centre, the third being a human tooth.

The Romans were very keen on good teeth, one of their favourite curses being, "May your teeth turn black." Celsus, who lived in about 100 B.C., was the first to write extensively on dentistry, and he gave some extremely rational cures for dental disorders, and he was the first to mention packing the cavities of carious teeth with lint or lead. Other writers followed him, but drifted again into legendary fantasies, for example : "Spitting into the mouth of a live frog and begging him to hop off with the cursed ache." Urine was still considered a good mouth-wash to strengthen the gums of patrician ladies. Their mechanical technique seems to have reached an exceedingly high level, as proved by a specimen of a gold crown reputed to have been made somewhere about 100 B.C. Dentures also seem to have been in vogue around this time. Barber-surgeons did the extractions and goldsmiths the restoration work. The empire fell into decline and as the people had many worries, dentistry was allowed to deteriorate.

The Arabians, who kept alive some of the old skill, were the only connecting link between the past and the present. From our point of view, the position grew worse in the Middle Ages. Science was almost stamped out as an evil thing. People reverted to magical cures once again. The tusk of a Narwhal was supposed to have superhuman

qualities for curing tooth-ache. It was reputed to be the horn of the legendary unicorn until this myth was exploded by European sailors bringing some hundreds of identical tusks from the North Atlantic where this whale makes its home. The barbers were incorporated in England about 1460, and under a charter from Henry VIII they united with the company of surgeons, the barbers being limited to the extraction of the teeth. The keeper of the public bath house was an amateur tooth-puller, and when the state executioner was away he was not averse to gouging out a few molars. Apart from these extractions, dentistry in Europe was almost non-existent for more than a thousand years.

In the sixteenth century Ambrose Paré was born; he did not fill teeth, but he extracted, opened dental abcesses, and set fractured jaws with great skill. He was the first to make obtutators for syphilitic disease of the palate, a condition which was frequently found in France at that time.

In the seventeenth century Leeuwenhoek invented the microscope, and so was able to examine enamel and dentine, and to investigate the micro-organisms from tartar scrapings.

A book, reputed to be the first ever written in English on Dentistry, by Charles Allen, was printed and published in the year 1686 in Dublin. I am not going to dwell upon this interesting treatise except to give you a quaint quotation from it :—

> First I would choose an animal whose teeth should come nearest to those of the patient; as a dog, a sheep, a goat, or a baboon, etc.; and having tied his legs together, I would fasten his head in some convenient place, so that he might not stir in the least, and by some proper means keep his mouth open as long as I should have occasion; that done, I would open the gums round about the tooth to be taken out of his head, not only to the very jaw bone, but as far between the said bone and the tooth, as the finest instrument could go, leaving a very little portion of the gums about it; and then having used the same circumspection, in dividing the patient's tooth from the gums, and the jaw bone, I would draw it forth, and put immediately in its place, that of the brute; fastening it very well and straight between the other teeth; and then with the use of suitable remedies, I do not question in the least but that it would unite to the gums and the jaw bone, and in a little time become as fast as any of the others; which performance might properly be termed natural restoration, or renovation of human teeth.

Fauchard was responsible for the beginning of modern dentistry. He practised in Paris round about 1715. He wrote a book which was translated into German, and for many years remained the encyclopœdia of dentistry. In August, 1872, this announcement was found in a New York paper :—

> Teeth.—Any person who is willing to dispose of his front teeth may hear of a purchaser by applying to No. 28 Maiden Lane, for which a generous price will be given. N.B. Four guineas will be given for every tooth.

They would be obviously used for transplanting.

I would like now to touch upon the materials which, with only slight modifications are used to-day. Most of these materials were either accidently found or produced after a long period of exhaustive research during the beginning of the nineteenth century. Plaster was first used for models in the U.S.A. in 1844. Previous to this a laborious process was used in which wax impressions were taken and ivory dentures were ground down to fit the mouth.

Porcelain was discovered accidently by M. de Chateau, an apothecary in Paris. It is probable that he stumbled upon his great discovery because he noticed that his own teeth, which were made of ivory, became stained with every conceivable colour, whilst his mortars that he used for triturating his chemicals could be easily washed. The first porcelain teeth, however, earned the nickname of " french beans," and it was not until the memorable year 1844 that S. S. White began to manufacture porcelain teeth. Claudius Ash, the English founder of the firm which bears his name did much to make porcelain teeth what they are to-day. It was not until 1911 that J. Leon Williams described the three divisions of tooth form as they actually occur in the human mouth. Before this we can easily imagine the chaotic state produced by the innumerable types and sizes of teeth on the market.

I am not going into details as to how crowns and facings have reached their present perfection, of how the cast inlay was first conceived, of how Steele's famous facing came into being. Taggart who invented the inlay, was a profiteer who duped the dental profession into buying licences before they could use his apparatus, which was purchased at a fabulous price. In actual fact, Philbrook, a hitherto unknown personality, had made and used inlays long before Taggart. Like so many inventors, he had not realised its worth to the dental profession, and therefore had abandoned it. Through all this controversy the dental profession was extremely slow to realise that it was being duped by a man who was out to make money at the expense of his colleagues.

The story of how rubber was first used and of the perfection of amalgam, the discovery of gas as an anæsthetic, all make interesting reading. Perhaps anasthesia spurred on the conversion of rubber into vulcanite; people began to flock in their thousands to have their teeth extracted painlessly and left their dentists not knowing how to fill quickly enough the empty mouths they were producing. This much sought after process was eventually discovered accidentally by Charles Goodyear, who perfected his process and took out a patent in the year 1851.

The anæsthetic nitrous oxide was originally used as a means of entertainment in America; people were invited to take a whiff of this gas whilst others watched their antics with great amusement. This took place in the year 1844, which was an epic one in the history of Dentistry. The use of Plaster of Paris, the manufacture of porcelain teeth on a large scale, and the realisation of the value of nitrous oxide as an anæsthetic, all took place in this year.

Meanwhile dental schools had begun to spread, education was at last considered an essential thing before anybody could extract an offending tooth. Black's classification of cavities enabled dentists to put in amalgam fillings which would remain in place. People began to realise that teeth were more important to their health than they had ever realised. The X-ray showed us that all was not well with treatment that was hitherto considered satisfactory. It provided ample proof by educating people to the fact that the teeth could hide lurking dangers. Focal sepsis and dental sepsis became the rule, but not until Miller brought this to the notice of medical practitioners in a paper read at Edinburgh. At first this led to indiscriminate clearing of the gums, and thousands of people suffered the fate of visiting the dentist to go away toothless but happy, confident that they would no longer suffer any ills. The happy medium was at last restored, and we owe much to X-rays for this proper state of affairs. There still remains the fact, however, that teeth can be and are at times a source of danger. At last dentists became important people, at last they were considered public benefactors. We must realise that we owe our present position to those pioneers who have gone before us, a position obtained by their struggles and their triumphs against a world slow to realise and adjust itself to modern progress.

Sector News

Guy's Letter

WE are very pleased that this fortnight we have to record no changes amongst the house-officers. Our President is enjoying a well-earned holiday, but his empty chair, revered by all, reminds us always of his absence.

The medical teaching has, however, necessarily undergone revision; there are now three firms, under the tutelage of Drs. Marshall, Douthwaite and Grant. Sir Arthur Hurst is to recommence his combined rounds on Tuesday next, and, it is rumoured, Professor Ryle is to honour us with a teaching round each week.

We have still three registrars and, with the present rapid turnover of cases, we can anticipate that our present high standard of teaching, for ward clerk and senior student alike, will be further enhanced.

It seems a long cry back to those days of hectic digging last August. The resulting scars embittered the sceptics at the time and, although events justified the forethought of these measures, the sores still remained. Then Miss Addiscott stepped in, with energy and persuasion, and induced bulbs to grow in that self-same soil which has for years refused to resemble turf. Far from being spoilt, the beauties, and the amenities of the Park have actually been enhanced by the rockeries we now possess.

Our attempts at social activities received a check when the dance in the Nurses' Home was cancelled, but we hope that further opportunities of communal entertainment will soon be forthcoming.

N. A. N.

Pembury Letter

IT is our duty to write the "Pembury Letter," and to try and give all who care to read it some idea of the life we lead here. It has never been our intention to distort the truth, and we have not been afraid to criticise what we believe to be bad, nor to praise what appears to us to be good. The guiding principle, therefore, has been to see that what we have stated as fact is fact, and we have always been at pains to make it clear when we are reporting rumour, however well founded. It was with no small astonishment, therefore, that we found ourselves before representatives of the K.C.C. charged with having made misstatements. Whilst paying tribute to the friendly way in which we were received, we state emphatically that the charge could in no respect be substantiated, and what really had happened was that the K.C.C.

had read our description of the appalling living conditions of the Guy's nurses, as meaning that it applied to all nurses in the service of the K.C.C. That, of course, is not true, and our description can only be taken as applying to the Guy's nurses now stationed at Pembury. What we have previously stated about those conditions we repeat. We believe we understated the case, not knowing that the building had been condemned as " Unfit for human habitation."

Our remarks have not been entirely in vain, for soon after they appeared a number of nurses were removed from Pembury to relieve the congestion, and shortly afterwards hanging cupboards and bedside carpets were provided. When these improvements had been effected there was a further inspection by high officials of the E.M.S., K.C.C. and nursing profession. We are led to believe that this commission still considers the accommodation utterly unfit for nurses, and we leave you to imagine what it was like originally. We hear a rumour that the nurses are to be moved to new quarters, and we hope it is true. We should like to express our gratitude to the officials who have visited us.

Since our last letter we have said a mournful farewell to Drew and Stewart, and welcomed Budd and Douglas to our midst.

We also report that there has been a reorganisation in the allotment of beds, and we welcome the change. We feel certain the new system will work satisfactorily.

Finally, we understand that when the war began the first emergency equipment to arrive was three sets of Hegar's dilators and four pairs of Volsellum forceps. You simply cannot tell where bomb fragments will get to next !

N. M. J.

Joyce Green Letter

IN statu quo, the usual note made once a week in the chronic wards, might well suffice as a title for this week's letter, so little is there to report.

The grounds of Joyce Green have a reputation for the fauna and flora which they contain, due largely to the efforts of the late Superintendent, a keen botanist; we welcome therefore the approach of Spring and already are being taken by an enthusiast to see some rare specimen once more bursting into bloom. We are told that many flowers blossom here which the Curator at Kew would be proud to possess. Not only are there signs of new life in the plant world. The Hospital sheep population has been trebled in the last few days and lambs are frolicking on our golf course and around—not, we would hasten to add, within—the wards. And so, in imagination at any rate, meat rationing has no qualms for us. All these signs of Spring have induced some of us to start using the two excellent tennis courts here, and golf enthusiasts are preparing to try out the Hospital course.

Following the Christmas Concert given by the Medical Staff, the Sisters and Nurses decided to give a concert, and this was presented last week. Although some of the soloists lacked confidence the sketches on the whole were good and were certainly well acted. Dr. Coughlan has now succeeded in removing Herbert's toffee apple which was thrown at him from the stage, and although "Herbert" lost a little of her dignity when she entered next morning, she now reigns supreme again. We thank the Nursing Staff for an enjoyable evening.

We were very sorry to lose McArthur who has been transferred to the Southern Hospital but are glad he is near enough to visit us.

L. G. S.

Correspondence

The Dental School

To the Editor of the GAZETTE

SIR,—The committee responsible for the affairs of the Dental School have decided that all students in their clinical period of study, with the exception of those attending the Probationary course, shall return to London on 1st April.

It seems to me that the following facts are pertinent :—

1. There has been a steadily increasing number of patients attending the Dental clinic since its inception.

2. The clinic has provided treatment for a very large number of children who were evacuated under the L.C.C. scheme and who would have otherwise received none but the most scanty attention. It has also treated members of the medical and nursing staffs and both medical and dental students, a large number of whom are still compelled to remain at their present station. In

addition a number of soldiers have received emergency treatment.

3. The inhabitants of Tunbridge Wells and district were beginning to visit the clinic on their own initiative, while private practitioners were referring patients for treatment which they could not otherwise afford.

4. While there was not sufficient work for all students to be employed, some twenty or more students could have worked to their utmost capacity.

There are many students who do not wish to return to London.

Now, Sir, is this decision in the best interests of the community or of the good name of Guy's itself?

The Board of Education strongly deprecates the return of evacuated schools to the cities from whence they came; A.R.P. efforts are everywhere being intensified to meet expected air attacks now that the weather conditions are more favourable. Yet the students must now abandon a scheme which was strongly recommended to them six months ago, and which they were willing to adopt.

Moreover, after first seeking the co-operation of the students at the start of the venture, they now propose to carry out their decision without consulting with those who have so largely contributed to the success of the scheme—the dental students.

Yours, etc.,

P. H. STAPLE.

Summerlands,
Portman Park,
Tonbridge.

Reviews

Diathermy. By Dr. W. BEAUMONT. Published by Messrs. H. K. Lewis & Co., Ltd. Pp. 303. Illustrated. *Price* 10*s*. 6*d*.

THERE is a growing tendency to place theory before practice, and this book is no exception. It sets out to be a textbook, but steadily becomes controversial, challenging and contradictory. Chapter I, on the physical characters of the diathermy current, is too condensed for the beginners, and is poorly compensated by an unwieldy glossary. No subheadings in the Table of Contents prevents quick reference, while no hint is given of the significance of the heavy-type numerals in the index.

On theoretical grounds Dr. Beaumont would substitute the terms "epithermy" for high-frequency, "generator" for machine, "capacity reactance" for impedance, and so on. The danger of changing the meaning of a word or, as here, disguising the meaning by a new word, is that it creates confusion and not clarity. In any case, both student and general practitioner have more need of practice than theory.

Chapter III maintains that heat is not the sole effect of diathermy; page 131 practically states the reverse. Again, page 71 suggests that activation of the sweat glands is a specific effect, while page 95 naively discloses that this is really due to the use of rubber bands. Admitting the need of good nursing in pneumonia, diathermy is discussed—and long-wave at that. Surely, good nursing here means absolute rest? Incidentally, hæmoptysis, extremes of age, cachexia and skin anæsthesia are all contra-indications in spite of page 112 declaring that the patient's sensation must always be "the final court of appeal." Further, we remain unpersuaded of the safety of long-wave diathermy in acute purulent conditions.

Oddly enough, little is said of super-imposed or imposed or combined treatments. "Errors of metabolism," page 77, call to mind diabetes mellitus and gout, which are certainly not due to a faulty heat regulating mechanism. Those that are listed on page 496, like the subjacent neurasthenia, would be better on sunlight. Similarly, many unresponsive arthritic joints do well with deep X-ray therapy; and bronchitis and asthma respond surprisingly to re-educational and postural exercises.

Unfortunately, few students can now afford 10*s*. 6*d*. for such a book. Incidentally, may I make a plea for these students? To have no standard of knowledge and skill is to let the quack have it all his own way. To have too high a theoretical standard is still to let him have it almost all his own way. Slight latitude might be allowed an examinee on theory if the applied skill was sound. It is here, on technique and dangers, that Dr. Beaumont is at his best, including short-wave diathermy and inductothermy, with many happily conceived photographs.

Finally, we at Guy's add our tribute to the late Dr. Elkin Cumberbatch. There could be no finer tribute to his unremitting toil than to re-edit and continue as standard works his books, of which every word was so clearly and carefully weighed.

K. N. G.

Hospital Information, etc.

Notice

BEIT MEMORIAL FELLOWSHIPS FOR MEDICAL RESEARCH

Notice is hereby given that an *Election of Junior Fellows* to begin work on 1st October will take place in July, 1940. Junior Fellowships are normally of the annual value of £400 for three years; but candidates younger than those usually elected or whose promise for medical research must be judged mainly on work outside that field, may be awarded a lower rate of £300 for the first two years. Candidates are asked to state whether they would be unable to accept this lower initial rate.

Candidates must have taken a Degree in a Faculty of a University in the British Empire or a Medical Diploma registrable in the United Kingdom. Elections to Junior Fellowhips are rarely made above the age of thirty-five years.

The Trustees are desirous of furthering research in Mental Diseases, and in the general allotment of Fellowships will give some preference to a candidate proposing research on approved lines in that subject.

Applications from candidates should be received by 14th May, though late entries will be accepted up to 1st June.

Owing to the disturbance caused by the War, it is necessary for candidates to submit evidence that they could be given accommodation in the departments where they propose to work.

Forms of application and all information may be obtained by letter only addressed to :—

PROFESSOR T. R. ELLIOTT, M.D., F.R.S.,
Hon. Secretary,
Beit Memorial Fellowships for Medical Research,
University College Hospital Medical School,
University Street,
London, W.C.1.

Pass List

ROYAL COLLEGE OF SURGEONS OF ENGLAND.
FINAL F.R.C.S.
R. V. Coxon.

SOCIETY OF APOTHECARIES OF LONDON.
FINAL EXAMINATION.
February, 1940.

Surgery.
G. G. France.

Medicine.
T. A. H. Adkins — P. Haden
*P. S. Clarke

Forensic Medicine.
T. A. H. Adkins — P. Haden
*P. S. Clarke

Midwifery.
G. G. France — R. West

* Has now completed the examination.

ROYAL COLLEGE OF SURGEONS.
L.D.S.
FINAL EXAMINATION.
February, 1940.

R. R. Darracott
W. F. Dunn
A. Forbes
F. A. Gresham
R. F. Hoar
W. E. Jackson
E. C. Lewis
R. C. D. Morrell
W. A. T. Parsons
J. A. Pearmund
J. O. Pierce
G. E. A. Ralston

Papers by Guy's Men

Campbell, Maurice. The diagnosis of angina pectoris and coronary thrombosis. *Clin. J.*, 1940, lxix, 57.

Bull, F. Bocquet. A war-time phase on dental education. *Brit. Dent. J.*, 1940, lxviii, 186.

Broster, L. R. Differential diagnosis of Cushing's syndrome (Basophilism) of pituitary or adrenal origin. *Brit. Med. J.*, 1940, i, 425.

Changes of Address

E. R. Boland, Lt.-Colonel, Edgehill Training College, Ormskirk, Liverpool.

G. A. M. Lintott, Major, R.A.M.C., The Hydropathic, Peebles, Scotland.

C. S. Neame, Lt. A. D. Corps, Dental Centre, Hounslow, Middlesex.

J. M. Robertson, Surg.-Lt. R.N.V.R., 5, Gorringe Road, Eastbourne.

C. P. Symonds, Group Capt. R.A.F. (V.R.), Oxford Military Hospital, St. Hugh's, Oxford.

S. T. Williamson, Lt. R.A.M.C., 6th Field Ambulance, B.E.F.

Marriages

CORKER-RONAYNE.—On 20th January, 1940, at St. Mary's Catholic Church, Croydon, Dr. R. M. Corker of Warlingham, Surrey, to Miss M. M. A. Ronayne of Ballyhaunis, County Mayo.

Death

ROBERTS.—On 23rd February, 1940, at his home, Gwyddfor, Pen-y-Groes, S.O. North Wales, Edwin Shelton Roberts, J.P., M.R.C.S., L.R.C.P., at the age of 68 years.

EDS. { H.F.L. N.A.N.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LIV — *6th April* 1940 — *Number* 1349

PASSIM

THE new Government scheme for the evacuation of children from London and other districts to "safe" areas has been a prominent feature of the daily press during this last fortnight. We note with deep interest, and also with regret, that but 20 per cent. of the mothers concerned were sufficiently interested to fill in their forms; of these, only one-half were in favour of the proposals. The number of children flocking about the Borough is certainly little short of pre-war levels, and the usual proportion of these are seen each day in the Front Surgery.

Dr. Ellis has arranged to hold an extra out-patient session on Fridays to relieve the congestion of Wednesday morning. Our facilities for the in-patient treatment of these children are still terribly limited; a four-day-old baby has just been nursed back to health, in the folds of an adult bed, but Caleb and Diplock remain forlorn and empty. There are many arguments both for and against the reopening of these wards, but we do hope that the matter is under constant consideration.

▭

WE publish two interesting letters dealing with the subject of clinical teaching in this and other countries, and with the relative importance of the laboratory worker and of the clinician in the advancement of medical knowledge. Clinical research has been and will always be of superlative importance, but if the discoveries of the clinician are to be of scientific value, then it is essential that he be well trained in the scientific method and well versed in the adequate statistical control of the data he collects. Advances in medicine are dependent upon the adequate co-operation of these two forces; thus the treatment of diabetes mellitus was but partially solved by the discovery of insulin, and the growth of endocrinology has depended much upon clinical experiment. The extent to which the great clinical ability of the busy consultant can be utilised is a far more difficult problem; we feel that there is still need for an intermediary, in the form possibly of full-time units, composed of men capable of appreciating the clinical problems that they are set, and also of analyzing the mass of data they accumulate.

▭

THE recent decision of the Government to introduce wholesale conscription of medical men, according to their age groups, is, as it stands, a menace to the future of both medical teaching and research. We forbear to comment, however, until the details of the scheme are made known by the Central War Committee, but we hope that adequate provision is to be made for the training of future registrars and laboratory workers.

▭

WE record, with deep regret, the death on March 19th of Sir Patrick Laidlaw at the age of 58 years. He was a demonstrator of physiology at Guy's for some years after qualifying, and then again, from 1914 to 1922, he was Sir William Dunn Lecturer in Pathology. From 1922 until the time of his death he was a member of the staff of the National Institute for Medical Research, becoming in 1936 deputy director and head of the department of experimental pathology. His earlier work dealt chiefly with the pharmacology of the amines, above all histamine, but his most important contributions to medical knowledge lie in his investigations into virus diseases—firstly distemper in dogs and then influenza in man.

The Treatment of Respiratory Emergencies

By Bernard Leibel, Esq.

THERE are few conditions in medicine and surgery which call for such immediate and accurate treatment as respiratory emergencies. In hospital practice, asphyxia of the new-born infant, diphtheria, poliomyelitis and accidents in general and spinal anæsthetics are the commonest sources of such cases. In some localities drowning, electric shock and respiratory failure due to poison, gas and drugs frequently require the appropriate emergency treatment. Owing to the present state of war, the use of asphyxiating poison gas is a constant threat to both civilian and military lives, and therefore every medical man, at least, should familiarise himself with adequate methods of resuscitation.

METHODS OF RESUSCITATION

A patient is declared dead when respiration has ceased, when the pulse cannot be elicited and the heart-beat is no longer heard. However, there are cases of drowning on record where resuscitation was not started for a considerable time after the accident had occurred, and then only on an apparently lifeless patient. A successful result was claimed in each case. On the basis of these reports the following experiments were performed: Asphyxia was artificially induced in a series of animals and simultaneous electrocardiographic records taken. While the gradual inversion of the "T" wave, the lengthening of the "P—R" interval, and the production of a progressive heart-block are all of cardiological interest, it is important to note here that recognisable electrical complexes, indicative of a beating heart, were obtainable for as long as thirty to forty minutes after the last apex beat was audible. In other words, although the patient may be deeply cyanosed and under ordinary circumstances would be proclaimed dead, resuscitation is still indicated.

STEP I

The first and most important step in the treatment of any respiratory emergency is to establish and maintain a free air passage between the lungs and the exterior. The usual reaction to such a statement is to think of blockage of the upper respiratory tract by a diphtheritic membrane or a foreign body. While these are important considerations, the following experiment will serve to illustrate a fundamental which is the keystone of asphyxia and is rarely sufficiently stressed.

An unanæsthetised experimental animal is placed on its back and tilted downwards. By means of a fine-bore hypodermic needle, water is slowly injected into the trachea and allowed to trickle over the larynx. Spasm of the glottis results, and as little as 2 c.c. of water have produced asphyxia and death of the animal. The converse experiment was also performed. After installation of a tracheotomy tube and recovery of the animal, water was poured down the trachea in small amounts, at ten-minute intervals. Over four times the tidal air volume can be added within the space of an hour without causing the animal any serious embarrassment. These two groups of experiments show that it is not the liquor amnii of the new-born infant, nor the water aspirated during drowning, nor the inhaled poison gas in war-time that causes immediate death; it is the asphyxia due to the relentless reflex spasm of the glottis. Hence one cannot emphasise too strongly the importance of establishing and maintaining an open airway in treating these cases.

Installing a tracheal catheter under direct vision laryngoscopy is probably the most accurate means of producing an open airway. However, this apparatus is not always immediately available, and its use involves a certain amount of experience, as many housemen will testify. An alternative method, called blind intubation, involves the passage of a tracheal catheter up either nostril into the nasopharynx. With the patient's head well extended, the catheter meets the posterior wall of the pharynx and is reflected forwards into the larynx.

Experience has shown that digital separation of the vocal cords is very effective and, at the same time, is quite easy to carry out. An oral gag is applied and, with the tongue pulled forward, the index and middle fingers are inserted well down into the pharynx and, using the epiglottis as a guide, the glottis is opened by separating the fingers. This procedure will often result in the patient taking deep gasping breaths even before artificial respiration has been started.

In cases of an obstructing diphtheritic membrane, an impacted foreign body, or a neoplasm, tracheotomy must be resorted to. Since this can be satisfactory only if performed below the level of the obstruction, it is therefore wise to ascertain its position before starting the operation. While a tracheotomy when indicated must be swiftly

carried out, its heroic nature is no excuse for careless methods. With the patient's shoulders raised up on a pillow, and the head flat on the table, a mid-line incision extending down to the pretracheal fascia, is made between the cricoid cartilage and suprasternal notch. A long incision heals just as quickly as a short one, and often valuable time is wasted by fumbling about in too small an opening. One blade of a pair of Spencer-Wells forceps is inserted behind, and the other in front of, the pretracheal fascia and isthmus of the thyroid gland. Another pair of forceps is installed alongside the first pair and the fascia and isthmus of the thyroid incised in the mid-line. Distinction is no longer made between a high and a low tracheotomy; two adjacent tracheal rings, usually the third and fourth, are divided and an oval opening cut in the trachea. A tracheotomy tube is now installed and later tied in place by a gauze bandage. If this procedure is followed, there need be very little bleeding, and once the tube is in position ligatures may be tied and the artery forceps removed. The subsequent treatment of a tracheotomy is important, and may be found in the standard textbooks of surgery.

STEP II

A most effective form of artificial respiration is Schafer's method. The patient is placed in the prone position on a blanket spread over the floor or similar hard surface. Kneeling astride the patient and facing his head, the administrator firmly applies the palms of his hands to the lower part of the chest and loin, one on each side. He then leans forward so that his whole weight tends to compress the lower half of the chest, thereby forcing the diaphragm upwards. After approximately two seconds all the pressure is suddenly released, whereupon the chest expands again, the diaphragm descends, and air is drawn into the lungs. This is repeated about twenty times per minute.

Owing to the patient's shocked condition, there is a marked depression of the circulation, especially in the pulmonary circuit. This was demonstrated in the experiments quoted above, in which asphyxia was artificially induced. Within three to four minutes after the onset of unconsciousness the lungs were extremely œdematous and not unlike those seen in acute congestive heart failure. Thus, if during artificial respiration extreme force be applied against relatively non-compressible lungs a high intrapulmonary pressure will be produced. This is especially true if an open airway is not present. The inevitable result is pulmonary hæmorrhage, manifested by blood-stained foam dripping from the patient's mouth, and a blood-stained exudate in the respiratory passages at post-mortem examination.

The iron lung or Drinker respirator has proved very useful in the past, and, if available, it is a better choice than the Schafer method. This type of artificial respiration acts through the exertion of alternate negative and positive pressures, thereby avoiding, to a large extent, the risk of excessive compression of the lungs and pulmonary hæmorrhage. Also it acts chiefly through its effect on the abdominal wall as opposed to that on the rigid thorax. During the negative phase of the respiratory cycle, the abdomen expands and the diaphragm moves downward, the converse being true during the positive phase. Thus the resulting respiration is chiefly diaphragmatic in type and large tidal air volumes may be obtained quite effectively.

STEP III

By means of a refined thermostromuhr, rates of blood-flow were measured simultaneously in the carotid artery and jugular vein during the various stages of asphyxia. It was found that, after the initial excitory phase was over, the blood-flow fell quite abruptly to as little as 10-15 per cent. of its original rate, and that this was maintained until death finally supervened. With the circulation so depressed, and respiration stopped, one must conclude that the autogenous metabolic supply of carbon dioxide would be sufficient to stimulate respiration if such stimulation were going to be effective. Thus in order to overcome the cerebral anoxæmia, the best gas to administer is oxygen.

Various claims are held out for drugs such as cardiazol, coramine, and lobelia. They are all definitely specific in their stimulation of the respiratory and cardiac mechanisms, and if they are available should always be administered in their effective concentrations. It is impossible to discuss here the relative value of each of these drugs, but it must be remembered that, in any case, their absorption and distribution to the proper centres will be greatly delayed as compared with an ordinary patient. Therefore their position in the treatment of respiratory emergencies is only a secondary one, and reliance must be placed on the successive steps described above.

STEP IV

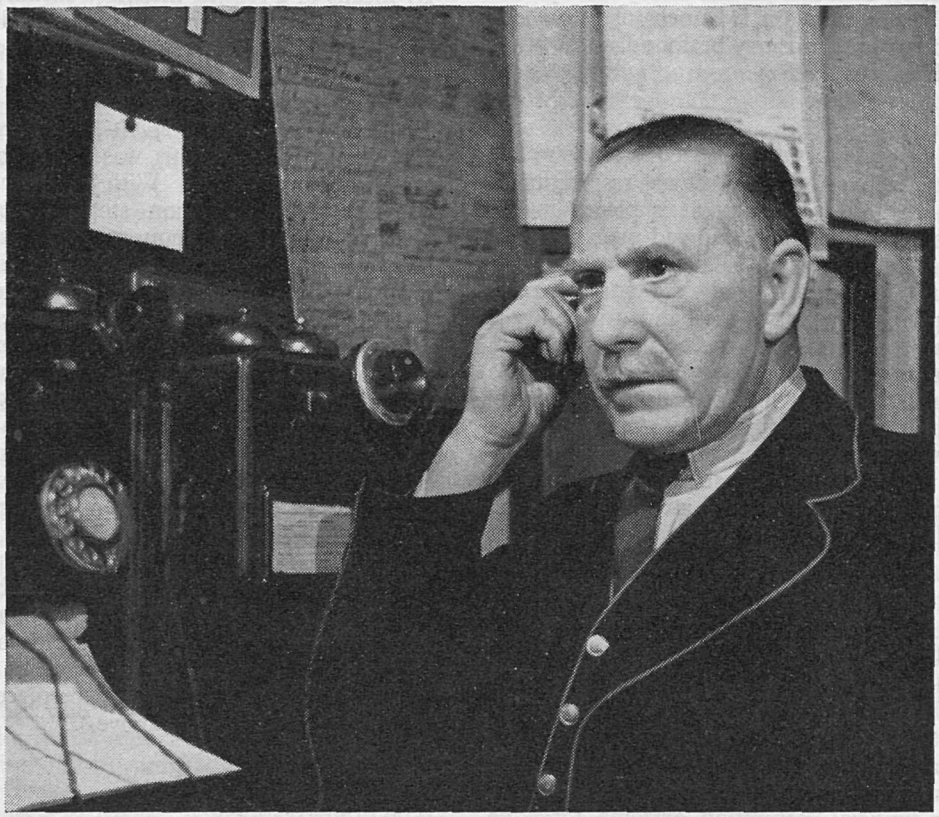
The after-treatment of such cases will depend largely on the severity and cause of the condition. Atropine should be administered early to relieve the pulmonary œdema and parasympathetic preponderance which appears to exist. The patient should be placed in a warm bed with plenty of

hot-water bottles and blankets. In view of the frequent occurrence of after-effects such as neurasthenia and recurrent headaches, it is a wise precaution to keep the patient either in a room by himself, or screened off from the rest of the ward, and to see that he is at rest and free from excitement.

The experiments, referred to in this paper, were carried out by the author in conjunction with Sir Frederick Banting and Dr. G. E. Hall.

" Ship "

RICHARD SHIPCOTT was born at Exeter in 1882. In January, 1900, he joined up with the Coldstream Guards and served with them at home and abroad in Egypt and elsewhere. In 1912 he was appointed from amongst a large number of candidates by Sir Cooper Perry to fill the responsible post of Front Gate Porter at Guy's. In those days " Ship " was working with Whitbread and only two other porters, apart from two resident bathmen. Ward clerks will be interested to learn that the number of porters was increased when one of the students sustained a rupture through lifting a patient. " Ship " was at the Lodge to register his name on the board when Sir Arbuthnot Lane made his first entry to the Colonnade as a Baronet, and when his firm and others turned out in force to welcome and congratulate him. " Ship " joined up again to serve in the Great War, but was not to lose his former contact with the Hospital. His M.O. in France was none other than Dr. H. H. Elliott, who had seen him in the Hospital only six weeks previously, and who kept him in touch with Hospital affairs by handing his copy of the *Gazette* on to " Ship " each fortnight. When later he was wounded and transferred back to England,



" SHIP "

" Ship " entered a hospital at Folkestone, where Sister Hope was Matron, Mr. Eastes was the surgeon, although retired from Guy's, and two of the nurses were sisters of a Guy's man in practice in the Borough.

Since 1919 " Ship " has served in the College, and successions of Guy's men will remember him for his co-operation and good humour. On one occasion he went into the " Spit " in answer to a 'phone message and called out, " Is there a Rolands' Dresser here ? " From the midst of the turmoil there came a voice : " No, but there is a roll and butter here ! "

He thinks that the College is much too quiet these days, compared with the periodic " rags " of the post-war period, and the even more exciting bonfires in the Front Quadrangle before the War.

This Medicine

" Anti-Natal Clinic." — (*Notice outside new buildings, County Hospital, Farnborough, Kent.*)

Complications of Extractions, or the Surgeon again makes a mistake.—Extraction of the wrong or an adjacent tooth.—The tooth should be washed in sterile saline solution and replaced in its socket. The mandible is then fixed with a four-tailed bandage. The patient should be advised to consult a dentist with a view to further treatment.
(*Surgical Handbook.*)

An agitated Cape coloured man rushed up to his doctor one night saying : " Doctor, hurry, my wife is having a confamblyment ! " The baby was B.B.A., the doctor adds.

" Head Wounds : Amputations."
(*B.M.J. Table of Contents, March* 11*th.*)

" Retention of the Philippines. Danger of a Rupture."—(*Daily Paper headlines noted in the " Guyascope " of* 1898.)

A Hybrid ?—" With the B.A.F. in France."
(*The Times, March* 10*th.*)

Thoughts on returning to Guy's.—" I hardly want to go to ' Hay Fever.' Just another of those clinical lectures, I suppose."—(*Overheard when a former member of the Junior Staff was considering attendance at a local production of Noel Coward's play last Saturday.*)

" When a sad and sicke patient was brought to him to be cured, he laid him on a downe bed, crowned him with a garland of sweet-smelling flowres, in a faire perfumed closet delicately set out, and, after a potion or two of good drink, which he administred, he brought in a beautifull young wench that could play upon a lute, sing and dance. . . ."—(*Robert Burton, " The Anatomy of Melancholy,"* 1621.)

This fortnight's prize of five shillings is awarded to Mr. M. H. F. Osmond, of Farnborough, for submitting the first entry.

An Experience with a Lower Third Molar

A Paper read before the Dental Society

MR. CHAIRMAN and GENTLEMEN,—The third molar, better known as the " wisdom tooth " to the lay mind, has always been regarded as an unnecessary complication in the development of the jaws. The public regards its removal as an unnecessary operation, until it gives rise either to a " fat face " or to continual pain. I would like to stress this erroneous idea held by the general public, for you will, more often than not, be told that the tooth does not hurt, so why bother to extract it ? Possibly the patient thinks that you are trying to extort an extra fee, but more than likely they are fearful of the extraction, this state arising from vivid descriptions gathered from their friends of prolonged tugging and wrenching, followed by days of pain and continuous visits to their dentist. Therefore it is upon your shoulders as dental surgeons to allay these fears and win the patient over to your side. You will be doing not only the patient but also yourself an immense amount of good, if you can persuade them to lose the tooth before it gives rise to trouble. The strongest advertisement for its removal is a method which guarantees as little after-pain as possible ; thus, to extract the tooth while the patient is in good health, when his

resistance is strong, and at a time when he is not too busy. I would suggest a week-end as the ideal time.

To-day the world outlook is depressing, everyone is affected in some way or another; our fitness is being tested, so that it is now that these third molars may start giving rise to trouble; I therefore urge you to look thoroughly at your patients' third molars, and if they are erupting badly, bring out all your persuasive powers and show the patient how much better he or she will be by the loss of such a tooth.

I am now going to give a brief personal account of the removal of a third lower impacted molar. I hope you will gather many points which will assist you in removing this tooth, so as to give satisfaction, both to yourself and to your patient.

As far back as last July I first realised that I had an impacted third molar; like most people I did not relish the idea of having it removed, and put this off until such time as the tooth should cause trouble. I did have the courage to have it X-rayed; the result showed that the lower left 8 was lying almost horizontal in the body of the mandible, hard rgainst the distal wall of the 7; the roots were conical and fused together, the tooth was covered by approximately one-eighth of an inch of bone, except for the antexo-internal mesial and postero-internal distal cusps, the tooth actually being rotated. I would like to stress here that an X-ray photo should be taken of any third molar that is under suspicion of impaction; the film will anticipate any trouble that might arise with these particular extractions, and so help to avoid after-pain.

I did nothing about my tooth until one morning, about three weeks ago, I was down at our clinic here when I overheard one of our surgeons trying to persuade a patient to have an impacted 8 extracted. I became interested when he spoke of having it done when the patient's resistance was high, combined with a time when he could obtain some rest. I heard this on a Friday, and I knew that I had nothing of importance to do that week-end; I had neither a cold nor German measles, so that it seemed an ideal time; therefore I decided to ask Mr. Bacon if he would do it. I took a light purge and retired early. Breakfast was taken about half an hour prior to the operation, which was commenced at about 11 a.m. Before describing the first stage of the operation, that of the injection, I would like to say a few words about the preparation of the surgical tables. A white sterile cloth should be gently unfolded on the far side of your instrument table. Nothing should be allowed to touch this cloth, except the actual sterile instruments that are to be used. Another table within easy reach can be used for holding the sterilised bin containing swabs, trays carrying sterilised instruments, etc. If you are using a novocain cup and boiling your own solution, afterpain may be reduced by boiling the solution before adding the novocain and adrenalin tablets. This has the result of making sure the solution is sterile. It can be assured that the tubes containing the tablets are sterile, but care must be taken in getting the tablets from the tube into the solution. The cork is removed, the end of the tube is flamed, and the tablets dropped straight into the solution; the cork is then flamed and replaced. In order to prevent too much boiling of the adrenalin, it is well to boil the novocain, that is the " F " tablets, then drop in the adrenalin, that is the " E " tablets. The one " F " tablet and the one " E " tablet give an anæsthetic solution of about 2 per cent. In my case as the operation was to be rather longer than a normal straightforward extraction, there was an increase in the novocain content, that is to say two " F " tablets and one " E " tablet.

For a lower molar extraction the mandibular regional injection is employed; there are two schools of thought on how this injection should be given. Personally I am in favour of the direct technique, but for those unfamiliar with both I will explain them briefly.

In order to give an indirect right mandibular injection, the operator stands in front of the patient and places his forefinger along the external oblique ridge, the finger will now be in the retro-mandibular fossa with the nail in contact with the mucous membrane covering the internal oblique ridge. The long straight needle is now inserted into the mucous membrane close to the middle of the operator's nail, with the barrel of the syringe lying in the left-hand corner of the mouth. The needle is advanced until bone is felt, it is withdrawn a little and the barrel swung over to the opposite side of the mouth and pushed in a backward direction. The barrel is now swung over to the left angle of the mouth and the needle continuously advanced until the bone is again felt. The needle point will now be in close proximity to the inferior dental nerve; the fluid is now injected. By this technique the internal pterygoid muscle is not pierced, but it has the disadvantage of sometimes stripping a little periosteum, and during the swinging the needle might break.

The direct method is more simple and the after-pain less. In this method the forefinger is used as before, the needle is inserted about half an inch in front of the finger with the barrel of the syringe lying approximately over the premolar teeth on the opposite side. The needle is advanced through

the internal pterygoid muscle to the bone. I am afraid I have rather got away from my experience, but I am hoping the last points may be of some use.

Therefore, to resume, the operator used the direct method. He wiped the mucous membrane over the area where the injection was to be given and then dabbed it with iodine. The needle was inserted and 1½ c.c. injected. After 6½ minutes a slow burning sensation seemed to move slowly from the point of the injection down along the mandible and at the same time there was a loss of sensation in the tongue. At this point the area surrounding the " eight " was tested with a probe. I felt nothing, but it was thought advisable to give a long buccal injection ; this injection was made in the buccal sulcus opposite the second molar tooth. Before commencing the operation itself, a white sterile cloth was placed round my neck.

The first step in the operation was to make an incision commencing half an inch distal to the visual cusps, proceeding towards them and, on reaching the cusps, turning at an angle of 120 degrees to run down into the buccal sulcus. The apex of the flap thus formed was firmly grasped by a pair of retractor tweezers, the connective tissue fibres holding the flat down were severed with a scalpel, the flap was then further freed by a blunt retractor. After the incision had been carefully swabbed and the underlying bone displayed, the question of the method of removal of the bone arose. The opinion of operators seems to vary as to whether the chisel or the burr is the best instrument for bone removal. For work under regional anæsthesia in an accessible position and for thin and less dense bone the chisel would seem ideal. The chisel has the great advantage of cutting cleanly and leaving the still living bone undamaged ; it also aids in a clear differentiation between the tooth and the bone. Desirable as this is, in the case of the third molar situated far back in the mouth the use of a chisel would be dangerous in consequence of the small amount of control that can be exercised over it ; thus the burr was chosen as being safe and easy to handle in this position. There are, of course, certain disadvantages ; histamine liberated by the damaged bone may be a factor in producing after-pain, although in my case this was not found to be true. Perhaps more important is the obscuring of the field by a sludge of powdered bone and blood. It would be well to state that care must be taken not to drill into the tooth nor to allow the burr to get too hot, as this will damage the surface bone and periosteum, this being a further contributing cause to after-pain and delayed healing. I wish to impress upon you that whilst burring is detrimental in some ways, sufficient bone must be removed to allow of easy extraction of the tooth, as excessive force and consequent damage to the tissues will again produce much future discomfort to the patient.

In my case, the drilling operation was commenced with a sterile No. 8 rose-head burr in a straight hand-piece ; distal to the visual cusps a hole was drilled down to the root of the tooth ; into this hole a No. 5 fissure burr was inserted and a trench cut distally towards the lingual plate ; this was continued down the lingual aspect of the crown, to allow access for elevators.

First, a No. 1 Winter's elevator was inserted on the buccal aspect, but the tooth could not be moved. I now had my first feeling of apprehension, for the straight pressure that was exerted on the elevator seemed to transmit a great deal of force ; I felt that the condyle might snap at any moment. More bone was cut away distally and a No. 3 elevator applied ; this time the tooth was actually moved, the impaction being reduced, but still it could not be freed completely, so once again resort was made to the burr, and then a No. 12 elevator was applied on the lingual side and the tooth raised so that it came out into the buccal sulcus.

After the tooth had been removed, the sharp angles of the bone were rounded off and all loose fragments removed. The cavity was then syringed out with warm normal saline. Black thread sutures were inserted, one at the distal end of the incision and one at the angle ; had the socket been infected no sutures would have been used. The sutures were arranged so that when tied, a space was left from which drainage could take place at the lowest point. There should be no packing of the flap, nor should there be tension on the sutures. The whole operation had taken an hour and I had felt nothing. The sensation given by the burring of the bone was similar to the use of a flame finishing burr on an amalgam filling.

The operation had now reached the point where the process of healing was to begin ; that is, the time when the patient leaves the surgery and passes out of your control, to be guided only by your advice. I followed the advice that should be given, and the result was a perfect recovery.

Immediately on leaving the clinic, I acquired a batting cup which was filled with ice and snow and made an ice pack. I then returned home and sat quietly for about two hours keeping the ice pack against the cheek. This has the action of decreasing the blood supply and keeping the swelling down. The ice pack should be applied as soon after the operation as possible, because it

is at this time that the blood vessels to the area are dilated and serum is exuded.

I was able to take a little soup about an hour after the operation. I rested all the afternoon, and at 6 o'clock I had some light fillets of cod followed by a glass of warm milk. Just before retiring at nine, the socket was syringed gently with hot eusol. I slept soundly until about nine-thirty next morning. The following day was spent quietly in an easy chair by the fireside. A short walk in the afternoon and again early to bed. The socket was syringed after every meal. I did not have to resort to anadine tablets or have dentalone packed into the socket, although I had taken the precaution to take some home.

On the Tuesday following the operation, the stitches were removed. They were cut with a pair of sterile scissors and withdrawn with sterile tweezers. The process of healing went on rapidly with no pain at all, so that my work was in no way inconvenienced. I can only thank the operator, and say that if you can persuade your patients to have their third molars out before they give rise to trouble and at a time when they are feeling fit, I am sure you will have very successful practices.

B. M. C.

Sector News

Guy's Letter

A MESSAGE has reached us verbally and informally from a General Hospital Somewhere in England that we are not nearly "martial" enough at Guy's. And it is true. After the excitement of the first few air-raids, we have relapsed into a peaceful routine of activity, disturbed only by the explosions of guns (which are practising, we are told), by the bursting of I.R.A. bombs in Piccadilly, and by the occasional arrival of ambulances filled with "casualties" to test what remains of our A.R.P. Those silent guardians of our peace, the balloons, are less in evidence than ever before. The other day we saw one solitary specimen silhouetted against the dying embers of a sunset sky. It was a most touching spectacle, and one more of beauty than of frightfulness.

Thus we at Guy's are busy in our own circles, and there may be a war on, but we must still perform our duty to those around us. Would our Army friends wish that we emptied still more of our beds, and stood at ease at their foot? It might appear from our writings that we have forgotten the war. But many things bring it home to us. There are the visits of our former colleagues, now resplendent in the uniforms of their particular Service. But even more striking to those of us who remain is the memory of those who have left us and are unable to return. We may pretend that we are carrying on as normally, but there remain those gaps of which we are always conscious, and which cannot readily be filled. Thus, as our staff grows less, our out-patients multiply fourfold. Both Medical and Surgical Out-Patients now threaten to become all-day sessions. The war has taught us, if nothing else, to value the work of those who have now left us.

This fortnight we must record the recommencement of Sir Arthur Hurst's Combined Rounds. We were honoured on this first occasion by the presence of Professor Ryle, who was able to give us his teaching, and to disagree in a friendly yet stimulating manner with Sir Arthur himself.

Even the walls have ears. One of our Senior Staff was recently heard deploring the students' complaint about the scarcity of registrars. "What do they want registrars for? Give them back the old G.P.'s, like we did in the last war." Thus we introduce another of the problems which the protean organisation of the E.M.S. is expected to solve.

H. F. L.

Pembury Letter

THIS week has seen the end of our Crusade, for at last the Guy's nurses have moved to their new quarters, which we understand are a great improvement on the old. We are very glad this has come to pass, and we are grateful to all who have moved the cumbrous gears of officialdom.

During recent weeks the Press has contained many references to the imminent conscription of the medical profession, and, though there has been no official confirmation of these reports, there is rarely smoke without fire. From the meagre information we can glean, it would appear that the Services are in need of medical officers alone, whereas the specialist ranks are already full. What interests us is whether we shall be conscripted to perform medical duties which are definitely out of our normal sphere of activities. We have already heard of one M.S., F.R.C.S. who was offered the post of M.O. in the army. We imagine that time had made him unfamiliar with

the intricacies of bronchitis, and that on these grounds he felt himself unworthy of such a position. We believe that a statement to clarify the whole situation would be welcomed in the sector and far beyond that.

The intermittent improvement in the weather has been very welcome, and there can be no doubt that "the sap rises." However, for the most pertinent remarks on the weather let us commend you to Professor Nicholson.

A department we have not so far mentioned is Pathology. Though rather short of "Lebensraum," only the highest praise can be given to the achievements of Dr. Taylor. In the same way we praise the hæmatological work of Dr. Waterfield. It is certainly luxury to have blood-counts that we can believe.

It is with great regret that we bid farewell to Dr. Vertue on his departure for Orpington. He could not have left us at a less opportune moment, for we have banked on his vast horticultural knowledge to help us "Dig for Victory." Now we must struggle alone. Even now we must go and water our potato and onion trees, or are they only weeds?

N. M. J.

Orpington Letter

FOR the last ten days an advance party has been preparing the new block, or rather one of its wards, for occupation and, by the time this letter appears, the main expeditionary force of doctor, nurses and patients, the latter chosen for their hardiness and phlegm (cerebral, not bronchial), will have moved across and either lost or won the great struggle for existence which many of our well-wishers have predicted. There are certainly stumbling-blocks ahead. It will take more even than the wit of a staff nurse to make an orthopnœic patient comfortable with the help of only two pillows and a bed whose back rises only a fraction above mattress level. Or who but a magician could sit twenty ambulatory cases down to dinner on four chairs at three small tables? But we are fortunate enough in having Sister Harrison with us now to guide this new enterprise and under her care we feel success is bound to be achieved. Very soon further wards will be ready for opening, if nurses can be found to staff them.

Tentative enquiries as to when the medical quarters are likely to be complete have been met with the admission that not only is the greater part of the equipment now present, but that it is being much appreciated by those Sisters who are temporarily housed there till their own quarters are ready. We have lately inspected the latter, and our fancy has been caught by the washing-room, where, along the whole length of one wall, rest twelve basins (h. and c.). The picture of twelve Sisters shoulder to shoulder at their ablutions will remain treasured in our imagination even though it may never become a memory.

We welcome Hawkins, our latest house officer, and are looking forward to greeting Dr. Vertue, who is coming here as our consultant physician.

G. L. L. R.

Joyce Green Letter

WE have had quite a large number of skin cases here at Joyce Green, and until recently they were scattered in different wards. Now, however, thanks to the efforts of Dr. Forman and our Superintendent, we have opened a new ward with approximately thirty beds devoted entirely to dermatology. This was soon filled to its capacity, and there were still many skin cases in other parts of the hospital. At the moment we have not got all the equipment we should like, but in the near future hope to get some ultra-violet light, and we are getting cases which would benefit from superficial X-ray treatment. This scheme of centralising all the skin cases is certainly proving a success.

In "Passim" a short time ago attention was drawn to short febrile holidays at Joyce Green, and we must confess that the rubella virus is still very active amongst us. Our latest victims were Hutton and Rilstone, who have, however, just returned. And so for another three weeks we shall be wondering who will be the next to qualify for a week's holiday.

Finally we welcome Dr. Phelan, who has recently arrived and is tending the sick over in Butlin's Camp.

Guy's Hospital Gazette
(ESTABLISHED 1872)

A Journal of Hospital News, Medicine, Surgery and Dentistry

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Correspondence

State Aid and Clinical Research

To the Editor of the GAZETTE

SIR,—Professor Wright's letter in your columns of 9th March on " State Aid and Research " raises important questions for the future. He is no more than right when he suggests that more time should be made available for teaching and research by clinicians. The present system means that no sooner is a promising man given a senior staff appointment than he begins rapidly, if not immediately, to be lost to research. There is, of course, another side to this picture. When Osler talked with Professor Ludwig in 1884 about the state of English physiology at the time, Ludwig (says Osler) lamented the lapse of a favourite English pupil from science to practice, but added : " While sorry for him, I am glad for the profession in England."

What is lost to research, is gained by the public. But Research—if research can be personified—must feel as the late Mr. Andrew Carnegie felt about a certain very progressive politician : " Some people are so far in advance of their party that they almost look like deserters." The present arrangements in clinical medicine may not mean much impairment of teaching (I think it involves some), but it does mean more or less desertion of research by senior teachers. This is doubly important, for I believe that the best teaching depends on a " researcher's outlook," *i.e.*, the attitude of mind in the teacher that depends on the co-existence in his mind of a spirit of enquiry, experiment and systematisation. If this spirit is not nourished by daily encounter with research problems, it slowly languishes, and although the mind that has once had it never entirely loses its reflection, teaching without the stimulus of contemporaneous research becomes more or less stereotyped.

Professor Wright makes comparisons with foreign schools which are not favourable to ours, and it has to be admitted, with some show of justification. Those of us who have worked in, or ever visited, hospitals in other countries become ashamed to show to foreign visitors some of our large hospitals, which are also teaching schools, except as museum pieces, and are embarrassed when we have to explain that a number of important departments have little or no representation, and that we have, almost without exception, to get on with a minimum of both the technical and secretarial assistance which is so plentiful in some quarters abroad. This defect is connected with the part-time nature of the average clinician's duties at any one hospital.

There are two possible ways of measuring the efficiency of our medical schools : (*a*) by the type of doctor produced, especially the type of general practitioner, since he is still, fortunately, the most numerous class of doctor anywhere ; (*b*) the quality of research bearing directly on clinical problems. It is very difficult to measure either of these even in a comparative way. Sir John Parsons, in an article in the *Lancet* (2nd March, 1940), which is well worth reading on this topic, says, " It is true that British medical schools turn out as good, if not better, men than any other country." I do not know how he arrives at this estimate. Morally, it is probably correct, but as to knowledge and skill, the matter is not so certain. In the field of research, it is perhaps possible to make a quantitative comparison. If we take the principal advances that might be supposed to have been stimulated at least by clinical work in medicine, *i.e.*, therapeutic advances, and advances in diagnostic technique, and list the most important of these, with their countries of origin, taking the twenty-odd years since the last war as a convenient interval of time, we tend, I think, to reach a conclusion which is not in our favour. I suggest, as a diversion in these times, that you organise a competition for the compilation of the most comprehensive list of this kind, with the country of origin of each discovery. We can comfort ourselves with the thought that the pioneer work which made these discoveries ultimately possible was often that of English physiology, or of clinical medicine closely combined with physiology, as in Mackenzie's work on the heart and Hurst's on the alimentary canal. If a similar comparison had been made thirty years ago, before medicine became so dependent on experiment and laboratory technique, and on applied chemistry, the balance might have been tilted to the other side ; but science advances, and we must advance with it and adapt ourselves. Not all this difference depends on factors connected mainly with medicine ; the greater attention paid to research by foreign commercial enterprises than by our own, especially in chemistry, has something to do with it.

Professor Wright's remedy is the provision of more full-time units; but Sir John Parsons maintains that to put teaching in their hands is a deplorable mistake. The work of units, he suggests, should be confined to post-graduate teaching and research. He maintains that clinical teaching of undergraduates should be entirely in the hands of those members of the visiting staff who are in private practice.

My suggestion is a compromise. While having a full-time unit to participate in undergraduate teaching, it would be a good thing to follow what Professor Ryle had in mind in his recent article in the *Lancet* on " The Future of Clinical Teaching," namely, that the clinicians should spend half their time at their hospital, and preferably at one hospital, instead of dissipating their energies at several. In this way their teaching would be both more extensive and intensive. They would have more time for reflection, and even for some research. Some financial rearrangements on both sides—sacrifice by the teacher and subsidy by the State—would probably be necessary.

Such rearrangements will naturally not solve everything. A reconsideration of the very principles of medical education is long overdue.

When I was a student we were expected to cram masses of fact, and very few of us got so much as a glimpse of the principles of scientific knowledge. I have suggested in the past that it would be an interesting experiment to spring suddenly another examination of the same standard on a group of men who had passed their professional examination in the same subjects a year previously. But I am told that the teaching of pre-clinical subjects has all been changed since my time; that facts are no longer the main desideratum, and that intelligent understanding of principles is the thing. How your readers must appreciate this!

Yours, etc.,

R. GILLESPIE.

Royal Air Force Hospital,
Matlock,
Derbyshire.

State Aid and Clinical Research

To the Editor of the GAZETTE

SIR,—Professor Wright's letter on State Aid and Clinical Research raises many important problems; his analysis of the duties of a full-time clinical worker is simple and direct, and should be instructive to many who have dismissed the problem without serious thought. While I agree heartily with almost everything that he says, I think that one side of the question needs further elaboration. His most important conclusion is that it is almost impossible, and certainly very difficult, for a clinician engaged in practice and doing his fair share of reading to do research. In his own words, " The days when research could profitably be restricted to examining patients in the wards has passed and the recent rapid strides in the practice of medicine have been taken largely as the result of a happy combination of ward and laboratory work." With this again I think most thinking people will agree substantially, but I do feel that the tendency to-day to project Research (with a capital!) into the laboratory rather than the ward and operating theatre is undesirable and has led to much wasted endeavour and many lost opportunities. It is true that it is difficult to-day to make important discoveries such as those of Bright and Addison by means of clinical study alone, but the reverse does not hold. Just because time is spent with test-tube and animal experiment it does not follow that world shaking discoveries are going to be made. The pendulum has swung much too far in the opposite direction since the great days of pure clinical research, and we are inflicted with Research (with a capital), which at once brings to mind a detached laboratory experimenter.

The object of this letter is to recall attention to the fact that pure clinical research is neither dead, moribund or even senescent, and to protest against the too-prevalent notion that no good or original work can be done by studying patients just because there are almost no more diseases to discover. It is still possible for an earnest and enthusiastic clinician to do valuable research work without seeing an animal, except as a domestic pet, and indeed important contributions to our knowledge are appearing constantly in this way.

Surgery offers wide fields of opportunity; the man who observes, records and follows up his operations in a thoughtful and careful manner should be able to produce a piece of " research " every bit as valuable and sound as the man who has worked on an army of animals. I have never been able to understand why the " human animal " should be considered such inferior material to the laboratory animal in promoting research. The two, of course, can and should be complementary, but many splendid pieces of research have been done on the human animal alone simply as a collateral of ordinary therapeutics.

Take, for instance, the conception of artificial pneumothorax treatment for pulmonary tuberculosis; this has been an enormous and brilliantly successful piece of pure clinical research. Take also the Jacobæus's method of improving the efficacy of a pneumothorax by cauterising controlling adhesions. In him and in later hands this has become a piece of surgical research of great importance and totally divorced from the laboratory.

Lobectomy and pneumonectomy in man are procedures which have been worked out almost exclusively on man, and I think that the useful knowledge of them obtained from animal experiment has been negligible. The surgeons who have been able to study a series of a hundred cases or more, drawing immensely valuable conclusions from their experience and results, are entitled to just as much recognition as Research workers (capital R) as the man who has killed a hundred animals or broken a hundred test-tubes. Unfortunately, such surgeons are not considered as research workers, but as mere therapeutists. I realise that the fact of performing a hundred or even a thousand operations of a particular type does not confer the title of research worker, but the thoughtful study of these cases before, during and after doing them may entitle the surgeon to the distinction.

I have taken these two instances from the thorax, but similar examples could with ease be chosen from any other part of the body.

I suppose we have ourselves to blame in great part for this maltreatment, as so many of us tend to do our work year by year without proper records and without proper follow-ups. This is often inevitable from the demands made by practice (hospital or private), and is, I realise, the justification for many of Professor Wright's arguments.

However, I wish to stress once more that it is still possible for a pure clinical worker to do research by the study of patients alone, and research, moreover, of a standard every bit as high as that which comes from the laboratory.

Professor Wright's "happy combination of ward and laboratory work" is clearly a desirable alliance.

The problem is not so easy as Professor Wright would have us believe. The full-time professor often finds to his intense disappointment that the calls of his administrative duties (especially attendance on committees) uses up most of that time which he had hoped would be available for laboratory or clinical research, and I have heard several professors (both medical and surgical) complain bitterly of this. We also have Professor Witt's record of his own experiences as head of the medical professorial unit at St. Bartholomew's, which was published in the *Lancet* when he gave up that post for one at Oxford.

Even should time and opportunity be there it does not follow that the man will respond, and this is shown by the disappointingly small amount of new knowledge that has come from most of the professorial units. The man who really wants to do something useful and progressive will do it whether he is a full-time professor or is in a busy practice. After all, Sir James Mackenzie managed it quite well.

Yours, etc.,
R. C. BROCK.

2, Harley Street,
Cavendish Square, W.1.

The Great Libel Case

To the Editor of the GAZETTE

SIR,—It may interest you to know that the article on "The Great Libel Case," which you reprint in the *Gazette* of 23rd March, was written by C. F. L. Leipoldt, who was a prolific contributor to the *Gazette*, and edited the paper from April, 1906, to June, 1907. The *Guy's Directory* says he is now in Capetown editing *Medical Journal*.

Yours, etc.,
F. W. MORTON PALMER.
(*Editor*, 1905.)

Woodlands,
Totnes,
Devon.

The National Union of Students

MEMORANDUM OF THE LONDON MEDICAL STUDENTS' COMMITTEE

BEFORE the war the majority of medical students knew very little of the medical activities of the National Union of Students. There was a Medical Sub-Committee, but its members came from universities so widely separated that expense alone precluded their meeting.

When the war came this committee was obviously not in a position to deal with the problems confronting medical students, particularly London students. The chaos in education was such at the beginning, when no one seemed to know whether it was the E.M.S. or the Medical

Schools which were responsible, that the N.U.S. decided to call together representatives from as many hospitals as possible to hear their views and see if anything could be done to improve the position. A committee consisting of one representative from each hospital was nominated.

The first big question which the committee tackled was that of the status of medical students in war-time. A list of questions was drafted and presented to the Minister of Health by a member of Parliament. As the committee did not regard the rather general terms of the reply as satisfactory, they addressed a further letter to the Minister. The reply defined as nearly as possible the status of medical students, and was as follows :—

1. The question whether clinical students are expected to report to hospitals in order to help with casualties in the event of air-raids must be determined by those who are responsible for the arrangements of the medical school to which each student belongs, and students would only be called on in the event of it being decided between the Deans of the schools and the officers responsible for the treatment during the emergency that it was necessary to interrupt present-time arrangements for education, either for the reason that conditions made such education impracticable, or such extra assistance as the students could render became necessary.

2. Medical students who are injured in an air-raid, whether working in a hospital at the time or not, are in precisely the same position with regard to compensation as members of the public.

3. As already indicated, the time at which and the extent to which it may be necessary to ask students to assist in the treatment of casualties are matters which cannot be settled in advance. There has never been any intention of using students in a professional capacity whether to replace either doctors or nurses while these are available.

4. If asked to assist in treating casualties in hospitals, students would, like all other subordinate personnel, be under the control of the officer in charge of the particular hospital in which they are serving, although their allocation to the hospital or their transference to another hospital will be settled between the appropriate Group Officer and the Dean of the school to which they belong.

The London Medical Students' Committee has recently received a request from other universities to call a national conference of all medical students, where all points relating to their life and work can be thoroughly discussed and possible action determined on. The committee has acceded to the request and has started arrangements for the conference to be held some time in May at a Midland University.

The conference will deal particularly with the financial and educational aspects and will also have sessions on :—

1. Student representation on school governing bodies.

2. Medical students and the war.

3. Professional prospects.

While there will be only one official representative of each student society present, it is hoped that all students interested will try to go and make their views and suggestions known at the conference so that this may be a really big event in student history. It is strongly felt by the committee that the present level of examination standard and in general the quality of education must be jealously guarded and, if possible, improved.

Up to date eight of the big London teaching hospitals are represented officially on the committee and it is hoped that those not as yet represented will very shortly elect representatives so that the views and suggestions of the committee may become more nearly those of all medical students.

The Rubaiyat Revised

(Reprinted from the "Guyoscope," February, 1906)

LIX.

Listen again. One evening at the close
Of Takynuik, ere the slacker time arose,
In that three-cornered Ward I lay abed,
With the nurse Population round in Rows.

LX.

And, strange to tell, among the Maiden Lot
Some would talk scandal, while others not;
And suddenly one more excited cried,
"What is the latest, pray, and whom's she got?"

LXI.

Then said another, " Surely not in vain
My Features have been rescued from the plain,
That He that used to talk to me on Night
Now shuns me that I've come on Day again."

LXII.

Another said, " Why, ne'er a foolish clerk
Would browse with you excepting in the Dark ;
Shall he that is the Darling of the Home
E'en look at you when passing in the Park ? "

LXIII.

None answered this ; but after, silence brake
Another of a far more comely Make :
" They often smile at me when passing by,
And sometimes Men to whom I never spake."

LXIV.

Said one, " Folks of a fiercer Matron speak
And paint a sterner glance upon her cheek ;
They talk of some strict ruling for us,
That only one should get engaged per week."

LXV.

Then said another, with a long-drawn Sigh,
" My Chances to Oblivion have gone by ;
But, find a bald and middle-aged Man,
Methinks I might recover by-and-bye."

LXVI.

So while the Nurses, all at once, were clattering,
One heard some Footsteps down the Passage pattering ;
And then they jogged each other—" Sister ! Sister !
Get back to Work again, and cease your chattering ! "

Sport

Rugby

Guy's v. Aldershot Command

(At Aldershot on Saturday, March 16th)

THE players were very much impressed with the excellent condition of the turf on the Aldershot Command ground. This gave them great hopes of an open game, which was amply borne out by the subsequent play, and resulted in an easy win for Guy's by 2 goals, a dropped goal and 4 tries (26 points), to 2 tries and a penalty goal (9 points).

Aldershot turned out a fairly good side with a few personalities, outstanding of whom were Sayers and Hayden Tanner, and it was a pleasure to find Fletcher, the ex-Guy's forward, in the Aldershot pack. Sayers was conspicuous throughout, and many of the Aldershot movements were due to his genius. Of the Guy's team Babrow was in his best form and was the outstanding three-quarter on the field. Halamandres and Van Steytler returned after many weeks' absence, and with Sharpe hooking well in place of Osmond, Guy's had a fair share of the ball. It was interesting to see Guy's packing 3-4-1, a combination which appeared to suit their style of play, and with Williams leading the pack well, the forwards had one of their best days. They were hard pressed at times in repulsing some of Aldershot's loose rushes, but never hesitated to go down on the ball.

Guy's kicked off against a stiff breeze and immediately attacked, a three-quarter movement taking them to the Aldershot 25 ; this was relieved by an Aldershot forward rush, and from a loose scrum Tanner broke clean through and sent Cranfield over for an excellent try in the first five minutes. Sayers failed with a difficult kick. Guy's were again defending when a long kick was knocked on, but the pressure was relieved by a kick to touch. After a drop out, following an Aldershot punt ahead, Van Steytler tried to break through, but was collared by the opposing forwards, but immediately made amends with a nice touch-kick. Crawford had a hard fight to reach the line, but after handing off three opponents was eventually forced into touch.

Babrow came into the picture with a beautiful cut-through between the centre of the field and the touch-line, and although chased showed much speed to touch down for a good try. Mullins failed with the kick. A forward pass stopped a promising Aldershot movement, and a cross-kick by Charlton reached Williams whose pass was dropped. Then came another try for Guy's, following a perfect bit of passing the ball went all along the three-quarter line to Charlton, who scored near the flag, but was too far out for Mullins to convert. During an Aldershot attack, Sayers appeared to attempt a drop at goal, but the ball ran across to the left wing to Cranfield, who gathering nicely, touched down in the corner.

Sayers failed with the kick. Half-time arrived with the score 6—all.

From the resumption Aldershot intercepted a pass and they were all but over. Then Mullins broke away. Two nice kicks by Van Steytler took Guy's into the Aldershot 25. Babrow intercepted a pass and made ground, but his pass out was dropped. Mullins made a long kick to touch, which was followed by a loose scrum, from which it was difficult to see the ball, until Bulstrode emerged and touched down under the posts, completely to the surprise of the opposition. Kynaston had no difficulty in adding the extra points. Guy's were now pressing hard; Crawford forced his way to the centre, and Kynaston, running through with him, took his pass well and scored in a good position for Mullins to convert. It was a pity that Aldershot lost the services of Cornish, who went off with a nasty gash under his eye, and did not return.

Finnegan made a mark and set Guy's on the move again, the ball being worked to the left wing until it reached Kynaston, who deceived the opposition by a beautiful dummy to touchdown near the flag. Mullins's kick went high and close, but just failed.

It was surprising after a close first half to see Guy's take full command, but Aldershot fought hard and reached our line for Mullins to relieve with a kick to touch. Sayers kicked a penalty goal from an awkward angle, awarded against Guy's for "feet up." Back went Guy's to the attack, and Van Steytler dropped a goal from a few yards out. The final scoring followed a good piece of dribbling by Fuller, and it was fitting that he should score a try by following up well and taking an inside pass from Crawford, but, unfortunately, he met with a shoulder injury in the process. Mullins's kick failed. Babrow, who was constantly finding gaps in the Aldershot defence, was again on the move and broke clean through, but had no support, and this attack fizzled out, but Guy's were left easy winners.

Team.—R. L. Skea; J. P. Crawford, L. Babrow (captain), R. U. F. Kynaston, D. W. Charlton; J. van A. Steytler, C. Halamandres; D. N. Fuller, R. M. Sharpe, M. R. Mullins, J. R. D. Williams, J. C. Bulstrode, D. P. Finnegan, A. G. Albers, T. W. Renton. *Referee*—Mr. G. E. Beynon.

United Hospitals Cross Country

THE Forty-sixth Inter-Hospitals Cross-Country run over a five-miles' course was held on March 13th in Richmond Park, and resulted in a decisive victory for Guy's, who beat Bart.'s, the holders, by seven points, thus bringing back the Cup for the twenty-third time since its inauguration.

For the past six years the Guy's team had become so accustomed to following A. E. J. Etheridge home, that one wondered whether his absence would make any difference to the placings, but although Etheridge has gone, there is no doubt that his influence has remained, because it was team-work all the way that enabled Guy's to pack five men into the first thirteen places.

St. Mary's provided the individual winner in B. F. R. Brearley, who completed the course in the excellent time of 28 minutes 10 seconds, being followed home by J. P. Haile and E. J. Atkinson, both of Bart.'s. The first Guy's man home was H. C. Martin, who finished fourth, thus stepping up two places on last year's performance, a most creditable effort, especially as it proved all the high hopes held of him last season. A special word of praise is due to W. A. Porter in finishing fifth, and it can justly be said that he and Martin laid the foundation for the Guy's victory. A newcomer in B. F. Sartori ran into the eighth place, and as he has some time at the Hospital there is no doubt lots of room for improvement even on this excellent show. Our next man home was R. Merryweather, finishing tenth. He could hardly have been up to last year's form, when he finished fifth. Nevertheless, the experience gained last year must have had a splendid influence on some of the other competitors in bringing them nearer to the leaders. The last scoring place went to B. P. Griffin, who finished exactly as last year, in the thirteenth place, but whereas last year he had the mortification of dead-heating with a Bart.'s man, which incidentally gave Bart.'s the Cup, by half a point, he was able this time to score a whole point.

This being the first war-time meeting for the Kent-Hughes Cup, it can well be imagined that the preparation of the team was not without difficulties, and much credit is due to G. W. Taylor and H. C. Martin, captain and honorary secretary respectively, for their efforts in getting the team down to training, and maintaining the high standard of cross-country running at Guy's. They were ably supported by a keen set of members, with the result that the excellent team spirit displayed was typical of the wonderful tradition which has always been associated with Guy's cross-country running.

Guy's were compelled to gather their team from the various units scattered in the Guy's sector, and they deserve the heartiest of congratulations, as they spared no effort in getting themselves fit. Although the scoring men have been mentioned, we must not forget to praise all the other members

who filled the minor places, and let us hope that their experience this year will inspire them to battle their way to the leading places should the race be held again next year.

In training, the Club has had the good fortune of the facilities offered by the United Hospitals at their headquarters, the Dysart Arms, Richmond, which is available to any Guy's man who cares to go down, and a hearty invitation is extended to all.

The United Hospitals have enjoyed one of their most successful seasons, having won more matches than they have lost, although there are a few more meetings to be held. It was an excellent performance to beat Blackheath over a six-miles' course, whilst against Cambridge University B. P. Griffin excelled himself by being first man home. Guy's have provided six members to the first team of the United Hospitals at various times during the season.

Congratulations to all the competitors in bringing the Kent Hughes Cup back to Guy's after an absence of a year, also to the organizers in arranging the meeting, as it is a crumb of comfort to know that such an event was possible in view of the fact that the majority, if not all, the inter-hospitals events will be cancelled during the war.

Result.—Guy's, 40 pts. (4, 5, 8, 10, 13); Bart.'s, 47 pts.; Royal Dental, 92 pts.; London, 111 pts.; St. Mary's, 128 pts.

G. A. R. W.

Nursing News from all Fronts

On Active Service :—

No. 3 General Hospital, B.E.F.—Miss Dorothy Rider.

No. 4 General Hospital, B.E.F.—Miss Margery Roseveare, Miss S. E. Belcher, Miss Dorothy James, and Miss C. P. Tanner who has since left the Service and is now Mrs. Heron.

No. 5 General Hospital, B.E.F.—Miss Frances Watson.

No. 8 General Hospital, B.E.F.—Miss Gladys A. Dobson, Miss Kate P. Jones, Miss J. K. Samuel.

No. 9 General Hospital, B.E.F.—Miss Phyllis G. M. Lloyd.

Q.A.I.M.N.S. Cairo, Egypt.—Miss Jean E. Scott.

24th London General Hospital (Embodied) at Hatfield House, Herts, contains many Guy's people. Miss E. E. Hughes (late Superintendent of the Co-operation of Guy's Hospital Trained Nurses) has been appointed Matron of a Draft Unit of this Hospital, which she will shortly be taking abroad.

Hospital Information, etc.

Notice

HOUSE OFFICERS

Vacancies for House Officers will occur in the following Hospitals, some on May 1st and others on June 1st :—

Guy's Hospital.
Dartford County Hospital.
Farnborough County Hospital.
Joyce Green Hospital, Dartford.
Orpington War Hospital.
Pembury County Hospital.
Preston Hall Hospital, Maidstone.

The salary, which varies slightly from time to time according to the number of House Officers sharing the pool, will probably be at the rate of about £160-£170 per annum, with board and lodging.

Applications, giving choice of hospital in the first instance, should be lodged in the Superintendent's Office, Guy's Hospital, not later than Friday, April 12th.

T. B. JOHNSTON,
Superintendent.

Papers by Guy's Men

Witts, L. J. Heparin in subacute bacterial endocarditis. *Brit. Med. J.*, 1940, i, 484.

Layton, T. B. Transport of wounded: Surgical aspects. *Lancet*, 1940, i, 537.

Simpson, C. Keith and Another. Spontaneous hæmothorax. *Ibid.*, 547.

Barber, H. W. Lupus erythematosus: The effects of sulphonamides. *Ibid.*, 583.

Maizels, M. and Another. Diluents for stored blood. *Ibid.*, 590.

Ogilvie, W. H. Treatment of Infected Wounds. *Ibid.*, 608.

Changes of Address

A. W. Ormond, C.B.E., F.R.C.S., 23, Devonshire Place, W.1. *Welbeck* 2610.

J. R. Forbes, Surg.-Lt. R.N.V.R., R.N. Barracks, Chatham.

A. M. G. Campbell, Fl.-Lt. R.A.F., Halton House, Aylesbury, Bucks.

Eds. { H.F.L. N.A.N.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

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PASSIM

NOW that Spring has arrived, we are beginning to appreciate to the full the benefits which the present system of Base Hospitals has conferred upon our patients. Ever slow to change, the Borough folk have long resented the idea of treatment so far away from home; so also have the multitudinous relatives and visitors, to whom the weekly visit to the hospital rivals the cinema in its attractions. Every device and artifice, down to the refusal book itself, have been employed in order to steal an extra week at the old place. Apart from the distance involved, most of this distrust was due to dislike of change, but some was generated by lurid tales inevitably spread by our deported "chronics" on their return, with grievances magnified a hundredfold. Mistakes have been made, of course, and at first many difficulties had to be overcome, but we are proud to-day that the traditions of Guy's teaching and treatment are being applied so widely throughout Kent. The Borough has come to realise this; most of the mothers are very willing for their children to visit Pembury for treatment, in default of our Children's Ward, and a majority of the adults now appreciate that the continuance of their hospital treatment in country districts is beneficial in many ways to their health.

The technical side of the transfer system runs very smoothly, but one important aspect is still far from satisfactory: this is the continuance and the completion of the case reports of the evacuated patients and their follow-up on return to town. A case is exhaustively investigated in the wards and as accurate a diagnosis as possible is made, when all relevant matter has been duly sifted; a line of treatment is instituted and the patient transferred; with him goes but a single sheet of notepaper, upon which all these findings and conclusions are supposed to be summarised. Further findings at the Base Hospitals, possible revisions of diagnoses and the response to treatment finally initiated—these are all lost to us and to the registrars of the future. Moreover, for those at the Bases, these brief summaries are often annoyingly short and ill-written; essential investigations may even require repetition and valuable time and patience be wasted. The despatch of X-ray films with the patients and their subsequent return has been efficiently organised; there seems to be no reason why the entire case report should not similarly accompany each case and return, fully written up, with him for summarising and the writing of doctors' letters; in the event of a patient's decease, they could be returned to the appropriate ward. Full liaison could thus be obtained between this Hospital and the bases and fuller continuity of treatment assured there; the reinstitution of out-patient treatment of returned cases would be simplified enormously. As a counsel of perfection, but an eminently practical one, the appropriate house officers could be called to the Eye Ward each Thursday, to see their returned cases, and rapidly review their progress and treatment before they depart for their homes.

A new system of summarising the case reports was instituted early this year; when performed efficiently, these summaries have added enormously to our secretarial duties, but their value is very doubtful. The patient's doctor now receives the second carbon copy of a pencil-written abstract of the case history, findings and treatment; this is both impersonal and illegible. Our summaries of the cases are of no more and no less use than were those of the ward clerk; it is far more important that each report, before reaching the registrar for classification, should itself be thoroughly revised. Every positive finding and fact should be checked and, just as essential, every relevant negative

observation should be detailed and corroborated; the ward clerk's account of examination and physical signs must inevitably allow errors to creep in and facts to be omitted. The houseman's bed-letter at the best is a summary and is often atrociously written. The time spent over summary-writing could be better spent on revision; if both of these functions are to be adequately performed, we shall have to hire a secretary or else night and day will come to have no meaning for us.

The report of the Central War Committee of the British Medical Association has now been published; we are young enough to resent the term "conscription" and its implications. There has not been and never will be any holding back on the part of our profession from service in the Forces. The correct staffing of the Emergency Medical Service and of the medical sections of the Forces is a matter of weighty organisation, rightly deputed to men of experience and our futures are, now arranged for us, step by step, whether we will or nay. The question of junior hospital teaching appointments and of the selection of those, if any, to be allowed to study for higher examinations, or to enter the field of research is conveniently glossed over, but we are assured that its importance has not been overlooked.

Obituary

JOHN HERBERT KEPPEL-COMPTON, M.R.C.S., L.R.C.P.

THE death took place suddenly on March 4th at his home at Bexhill of Dr. John Herbert Keppel-Compton, who had practised for many years in the South of England and was formerly public vaccinator for Southampton No. 2 District. Dr. Keppel-Compton was born just over seventy years ago at Hereford, and was educated at Weymouth College and Norwich Grammar School. He qualified M.R.C.S. (Eng.), L.R.C.P. (Lond.) in 1893. In his student days he was an athlete, and represented the Medical School in 1889 in the half-mile amateur athletic event. He was a member of the British Medical Association for forty-four years.

PHILIP GEOFFREY STAINTON, M.R.C.S., SURGEON-LIEUTENANT R.N.

SURGEON-LIEUTENANT STAINTON, who was killed in a motor accident on March 24th while on active service near Cape Town, qualified in 1933. After spending a year as medical resident at Ramsgate General Hospital he went for another year as assistant to Dr. S. S. Rendall in a general practice at Boston, Lincs. He next returned to London for more hospital appointments and then joined the Royal Navy, in which he saw three years' service before his untimely death. He was 31 years old.

A. H. DAVIES, M.B., B.Ch. (Camb.)

DR. A. H. DAVIES, who was aged about 64, followed his calling chiefly abroad. After holding an appointment in the Malay States under the Colonial Office, he went to Canada, where he practised in the region of the Great Lakes.

Owing to health reasons he had not been practising for some time, and had latterly gone to live in Vancouver. During the Great War he served afloat. Dr. Davies leaves a widow and daughter.

Painful Affections of the Anal Canal

By S. H. Wass, Esq., M.S., F.R.C.S.

PAIN is a very common symptom of affections of the anal canal. The lay person interprets this symptom as "piles" because it is the only condition in this region of which he has heard. In point of fact *pain* is never due to piles unless some complication of those piles has occurred. However, the lack of understanding of the painful affections of the anal canal is not confined to the layman. This is shown by the frequency with which dressers and doctors refer patients to the Out-Patient Department with a diagnosis of "hæmorrhoids," for which diagnosis there is often no justification whatsoever. When a patient's presenting sympton is pain in the region of the anus a diagnosis of simple hæmorrhoids is never correct; either some entirely different

condition is present or some complication has occurred in pre-existing hæmorrhoids.

The common conditions giving rise to pain in the anal canal, as they most frequently occur, may be listed as follows :—

1. Anal fissure.
2. Perianal hæmatoma (" thrombotic pile ").
3. Ano-rectal abscess.
4. Complicated hæmorrhoids.
5. Carcinoma of the rectum or anal canal.

ANAL FISSURE

An anal fissure is an abrasion or ulcer of the lower half-inch of the anal canal resulting from tearing of the mucosa, usually by hard fæcal masses. The mucosa of the lower anal canal has a somatic nerve supply (inferior hæmorrhoidal nerve) and a fissure is exceedingly painful The patient complains of severe pain brought on by the act of defæcation and persisting for up to an hour after the act. Constipation is frequently present, for defæcation is dreaded by the patient and consequently inhibited. Occasionally there is slight bleeding at defæcation, but the severity of the pain outweighs all other symptoms.

It is important to remember that the fissure is *inside* the anal canal and cannot be seen unless the buttocks are parted carefully and the lower end of the canal stretched open. This procedure is usually very painful, and it is noticed that the external sphincter ani is in spasm. This spasm may prevent the fissure being seen, but its presence may be deduced from the so-called " sentinel pile " which usually occurs at the distal end of the fissure. This " sentinel pile " is really the curled-up mucous membrane which was torn down in the formation of the fissure ; it appears as a small cherry-red swelling at the anal verge, usually in the middle line posteriorly. If the fissure is seen it appears as a longitudinal ulcer in the mucosa of the anal canal. In recent cases the fissure cannot be palpated, but in chronic cases inflammatory induration around the ulcer may be appreciable to the examining finger. In some chronic cases a sero-purulent discharge from the fissure may be seen ; sometimes a small subcutaneous abscess is present at the posterior end of the fissure.

Treatment.—The aim of treatment is to relieve pain and abolish sphincter spasm ; the fissure will then heal. Three methods of treatment are available :—

(*a*) Local anæsthetic ointments.
(*b*) Injection of local anæsthetic into the external sphincter.
(*c*) Operative excision of the fissure.

In recent cases healing is often obtained by the simple application of local anæsthetic ointments. The best preparation for this purpose is 3 per cent. decicaine in white vaseline applied thrice daily. The pain and spasm are relieved and healing frequently occurs, but this treatment should not be tried for more than a fortnight or an irritative dermatitis may develop.

In chronic cases or cases where decicaine ointment has failed, the question of injection of local anæsthetic into the external sphincter arises. The preparation used for this purpose is Proctocaine, a proprietary *oily* solution of local anæsthetic ; an aqueous solution would be useless owing to its rapid absorption, but the very nature of the oily solution renders its use dangerous. It cannot be too strongly emphasised that Proctocaine *must never be used in the presence of infection.* In such cases, owing to the fact that the oil is not absorbed, serious perirectal abscess formation occurs with sloughing of the rectum ; for this condition a colostomy is frequently necessary and may be permanent—a needless tragedy in the treatment of a simple condition ! Proctocaine injection is only indicated in acute cases where Decicaine ointment fails to produce healing ; in chronic cases it is only permissible in the entire absence of infection, *i.e.*, no palpable induration of the fissure, no purulent discharge from the fissure, and no sign of abscess formation in the anal region. In such cases 2.5 c.cs. of Proctocaine are injected into each half of the external sphincter ani. The needle is inserted one inch behind the anus and with a guiding finger in the rectum the injection is made into the substance of the muscle. The injection must *not* be made into the subcutaneous tissue, or sloughing will result ; nor must the needle penetrate the mucosa of the anal canal or infection and abscess formation will surely occur. Thus, unless the operator is familiar with the technique and certain of the incidations, he should *never* use Proctocaine or any similar preparation ; nor should it be considered a panacea, for it may well fail to achieve its object of healing the fissure.

Operative excision of an anal fissure is a simple procedure. It should be employed in all cases where Proctocaine injection is contraindicated or has already failed. A small V-shaped area of perianal skin and anal mucosa (including the fissure) is excised, with the apex of the V entering the anal canal. In the floor of the wound so produced the subcutaneous fibres of the external sphincter are seen and should be divided. The wound is left open and heals in about ten days with eusol dressings. This minor operation, with its short period of convalescence and inevitable

successful issue, is surely preferable to taking even the slightest risk with Proctocaine.

PERIANAL HÆMATOMA

This common condition parades under many misnomers. It is often called a thrombosed external hæmorrhoid or thrombotic pile, but it is *not* a pile. It is a perianal hæmatoma due to rupture of one of the thin-walled veins of the external hæmorrhoidal plexus; this is proved by the fact that on microscopical section the blood clot is extravascular and not within the lumen of a vein.

The patient complains of anal pain of fairly sudden onset, often first noticed during straining at stool. The pain is severe and acts such as coughing, sneezing and sitting may be agony. A swelling at the anal verge is noticed and sometimes the overlying skin ulcerates, leading to bleeding. On examination a bluish swelling is seen under the skin of the anal margin which is firm and tender on pressure. If the skin has ulcerated, blood clot is seen extruding itself. Rectal examination is normal.

Treatment.—Small hæmatomata up to the size of 1.5 cm. diameter may be treated conservatively. Frequent hot baths or, alternatirely, application of cooling lotions (Lotio Plumbi) give some relief, and the symptoms subside in four or five days. Fibrosis occurs in the blood clot and ultimately little evidence of the condition remains. Larger hæmatomata, or those in which ulceration of the skin has occurred, should be *excised*; the alternative method of *incision* and evacuation of the clot is not satisfactory as a wound with overhanging edges is left which often becomes infected. As in the case of a fissure, a V-shaped excision is carried out with the apex of the V entering the anal canal; a flat open wound is thus left, which heals rapidly.

ANO-RECTAL ABSCESS

An abscess in the ano-rectal region is always the precursor of a fistula-in-ano, and unless the abscess is recognised and properly treated a fistula will surely result. The abscess may occur under the perianal skin (perianal abscess), under the mucous membrane of the anal canal (submucous abscess), in the ischiorectal fossa, or rarely above the levator ani (pelvirectal abscess).

The patient complains of *constant* throbbing pain and frequently of an exacerbation of the pain at defæcation. With a perianal or ischiorectal abscess redness of the skin is seen; tenderness and induration, later fluctuation, are detected on palpation. On rectal examination a submucous abscess is palpable as a tender bulge in the wall of the anal canal; induration in the ischiorectal fossa is often felt with an abscess in that situation; a pelvirectal abscess is felt at the level of the ano-rectal ring, that is, with the finger introduced to the level of the second interphalangeal joint.

When such an abscess is detected immediate drainage must be instituted to avoid the formation of a fistula. The drainage must be free and courageous removal of a large area of perianal skin may be necessary; there must be no " nicking " of the skin or drainage will not be adequate and a fistula will result.

COMPLICATED HÆMORRHOIDS

The complications of hæmorrhoids giving rise to pain are :—

1. Strangulation.
2. Thrombosis.
3. Infection.
4. Injection ulcer following injection treatment.

Strangulation, or an " attack of piles," results when massive prolapse occurs in advanced cases of piles. The prolapsed piles are nipped by spasm of the external sphincter and the patient cannot reduce the strangulation. The sphincter spasm leads to obstruction of the veins and further swelling occurs; the nipping thus becomes tighter still and a vicious circle is established. Thrombosis of the piles often occurs, sometimes with sloughing, gangrene and infection. The condition is one of extreme pain and the diagnosis offers no difficulty. The strangulation must be reduced, under anæsthesia if necessary, and the patient put to bed. The foot of the bed is blocked, a morphia suppository is introduced into the rectum, and a lotio plumbi compress is applied externally. Operative excision of the hæmorrhoids will usually be necessary when the acute condition has subsided.

Neither thrombosis nor infection of non-prolapsed internal hæmorrhoids is very common. Thrombosis gives rise to a dull aching pain and the tender thrombosed pile is readily palpable on rectal examination. Infection of an internal hæmorrhoid gives rise to a submucous or ischio-rectal abscess.

An injection ulcer following injection treatment of hæmorrhoids is unfortunately only too common. It is inevitably due to a fault of technique : the common faults leading to ulcer formation are :—

(*a*) Giving the injection too low in the anal canal.
(*b*) Repeated injections at the same site.
(*c*) Injecting *into* the mucosa instead of into the submucosa; this always leads to sloughing.

The patient with an injection ulcer complains of severe pain, bleeding and tenesmus, symptoms far worse than those of his original complaint. The ulcer can often be felt digitally and may always be seen on proctoscopy. Relief is usually obtained from suppositories of ichthyol or morphia and healing takes place slowly. Sometimes abscess formation occurs, and this must be treated promptly and adequately.

CARCINOMA

Primary carcinoma of the anal canal is rare, but owing to the sensitivity of the anal mucosa it is very painful. Pain in carcinoma of the rectum is a *late* manifestation. It is due to downward extension of a low growth into the anal canal or to perirectal spread of the growth with involvement of the sacral plexus. In this latter case referred sciatic pain is usually present as well. It has been stated above that pain is a *late* symptom of carcinoma of the rectum. A patient with a rectal growth has no pain, and looks fit and well in the early stages. He complains of *bleeding* per rectum, which is almost invariably put down to "piles." Let us not ascribe such bleeding to piles until careful rectal examination, proctoscopy and sigmoidoscopy have eliminated the more serious lesions; and let us not hear any more of the bottle of "strong medicine" so frequently prescribed for rectal bleeding!

This Medicine

His Eye Saved—Doctor frees it from wire loop.—A boy fell against a fence in the garden. A piece of wire pierced his eye. Ambulance men found that part of the boy's eyeball had become threaded through a loop in the wire. He was taken to hospital. The senior house surgeon removed the eye and released it from the loop. Then he replaced it. The boy's sight is now as good as ever.

(*Extract from Daily Press.*)

"Probably the specific toxins of the syphilitic virus also play a part in causing the degenerative changes."

(*Taylor's Practice of Medicine, p.* 663.)

"Except in very slight cases no patient should be kept under medical treatment for more than ten days . . ." (*Re* toxæmias of pregnancy.)

(*Eden and Holland's Manual of Obstetrics, p.* 122.)

"*Strenuous* games such as football and running must be forbidden, but more *moderate* exercise such as walking, golf, or even *Tennis* are often beneficial."

(*Conybeare's Textbook of Medicine, p.* 551.)

The prize for this week is awarded to A. W. Hind.

Miss Addiscott

MISS ADDISCOTT and her Department are an essential component of Guy's Hospital. It is really inspiring to watch her maintain a sense of humour in the face of so much exasperating difficulty that is met with in her daily routine.

But let us read her own description of it :—

In March, 1921, I came to Guy's as a voluntary student in the Almoner's Office, the first of my kind, I imagine, as when I tried to explain myself to an elderly member of the Staff his comment was, "What the devil will they have next!"

The Department, much smaller then than nowadays, was housed where now is the office of the Medical X-ray; Miss Beardoe-Grundy was Almoner. What she did not know about Guy's after years as a Ward Sister and Almoner was not worth knowing, and though she was a fine and generous teacher to whom I owe much, she was emphatically not one who could ever suffer fools gladly.

A day in the Almoner's Office is a day of never-ending human interest—tragedy and humour treading on each other's heels—from the stunned wife who has just been "told" by the doctor

to the well-meaning father who faithfully comes " to get Danny's teeth seen to, Nurse," but omits to bring Danny.

We are not always entirely popular. Patience, though much practised in an Almoner's office, can wear thin as a busy day goes on—and one's ancient chronics drop in with a batch of grievances and a formidable list of " complications of diseases " culled from years of comfortable gossip with their fellow-patients, while waiting for the O.P.O.

very descriptive; one sad old man put his case in a nutshell when he said: " You see, Nurse, I bin and lost all confidence in my inside," and an excited Borough Ma really took us aback by demanding the immediate services of the District Nurse because " I got me old man under Dr. Gillyspy in bed with a 'isterical tortoise ! "

They are fragmentary glimpses that one gets of lives and events, but cumulatively over the years they leave certain clear impressions such as the curious blend of touching faith and yet of pro-

MISS ADDISCOTT

We have our moments of excitement, too, as when a transfer case arrives so fortified against the journey that she is unable to locate the door of the coach—or one of our pet hypochondriacs incensed at the bare suggestion that she could manage without her beloved crutches, flings them at the Almoner, and executes a really excellent dance of rage.

One sometimes feels that an Almoner's most useful function is to listen—and patients can be

prietorship that our patients show towards Guy's, accepting the Hospital service as an inalienable right and at the same time deeply and genuinely grateful for it.

Guy's and the Borough being practically 100 per cent. British, we get plenty of grumbles inside and out, but one comes to realise that there is a loving loyalty within and without which would be instantly in arms if the spirit and tradition of Guy's were ever challenged.

Sector News

Guy's Letter

THE clouds of international strife have begun to darken the sky, but no longer does Guy's excitedly respond to the feverish whims of political fancy. Hospital life has been organised on a high scale of efficiency, and each individual awakes with a full day's work to perform and very little time for lazy introspection. Nevertheless, we are always ready to don the mantle of a casualty clearing station should need arise.

Students may come and students may go, but the Conjoint Examinations will go on for ever. Every three months the harvest is gathered, the wheat is separated from the chaff, and so gloom balances jubilation. However, now that the teaching routine has been more or less re-established, one may anticipate a brighter outlook.

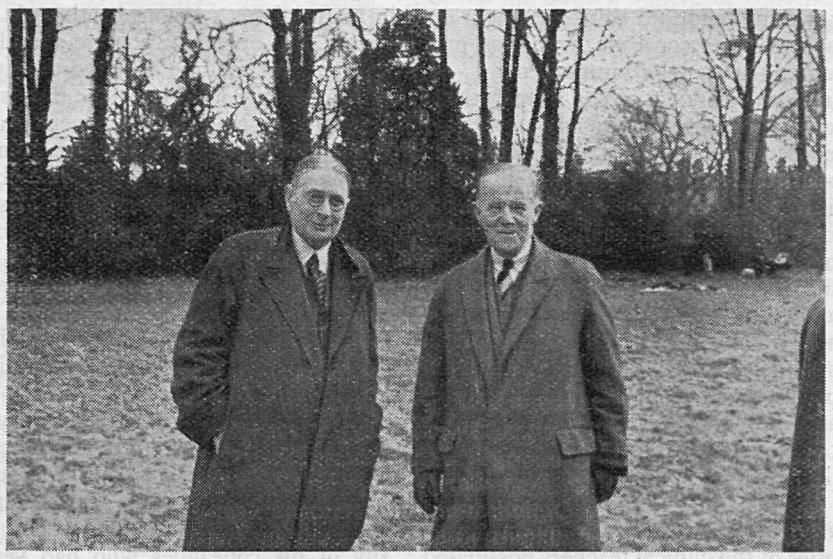
The steady flow of Guy's doctors into the Services continues. The latest departure has been that of Dr. Fletcher Lunn, who has donned a khaki uniform and stands ready to cope with the army wounded. We all wish him every success and the best of luck. It is rumoured that several of our senior staff are contemplating joining up, but this must be regarded as a short-sighted policy, for while they are at Guy's they are of potential use to the Army; once in the Army, they are completely lost to us.

B. L.

Pembury Letter

SINCE our last letter, momentous events have been unfolding themselves in the world, and amongst them must be mentioned a brace of hockey matches waged with great violence at Pembury. The opposing sides were the Guy's Nurses and the Staff. Certain neutral observers (their portraits are printed below) claim that the sound of explosions could be heard in Tunbridge Wells Fiord. Although the result of the battle was in doubt for some time, the Staff eventually came out the victors with an undefeated goal Notable feats were performed by Mr. Lambrinudi, who kept goal in an exemplary manner, and was kept busy all the afternoon getting through a packet of cigarettes. We are assured that had the ball come his way he would certainly have stopped it. Dr. Grasby, with forethought or a suspicious mind, came equipped with shin guards, but the rest of the team found themselves unarmoured. Fortunately casualties were negligible, though the next day any member of the Staff was a perfect advertisement for "Doan's Backache Pills." However, there was no doubt that everyone thoroughly enjoyed the encounters.

Last Thursday we attended a highly successful dance at the new Nurses' Home at "Broomhill Park." To put it modestly the mansion is truly magnificent and really suitable for accommodating



Twice round the abdomen, once round the field!

Guy's nurses. We hope they will be able to enjoy many happy hours of comfort and recover from their previous incarceration.

We have previously remarked that the war has had some beneficial effects on teaching, and we are glad to report that at the recent midwifery examination Pembury had 100 per cent. success. We believe this to be a record unequalled even on the other side of the Herring Pond. We offer our congratulations to the candidates and to Mr. Chapple, Dr. Grasby and Ivor Thomas for their tutoring. Finally we wonder whether Mr. Chapple still teaches the way to diagnose twins by "cocking a snoot," and if so do the R.C.O.G. recognise this as being orthodox?

N. M. J.

Correspondence

Clinical Teaching and Research

To the Editor of the GAZETTE

SIR,—In "Passim" on March 23rd you said that clinical teaching in the Sector had been benefited by the war, and a similar statement has been made by the authorities in other sectors. As a general statement I can hardly believe this to be true; but if it be so it is, as others have pointed out, a severe indictment of pre-war teaching, and everyone who holds it true must surely do his utmost to secure some such reforms as Professor Ryle has suggested, particularly as Professor Ryle's endeavour is to bring about just those conditions of more intimate personal contact that have been found so advantageous in the Sector.

In some comment in "Passim" on Professor Ryle's suggestions objection was taken to whole-time clinical posts as being opposed to the Guy's tradition; from this, discussion has now passed on through State Aid and Research to State Aid and Clinical Research, and we are rather a long way from our starting point. I think we might do well to go back to Professor Ryle, who was primarily concerned with the improvement of clinical teaching, and in view of the observations made by some of his chief critics we may profitably dwell on the fact that he only suggested one whole-time post in any one branch and that the holder of this post would be a man of mature years who had proved his worth in years of service as a part-time consultant; research was hardly mentioned, and then only in a suggestion that a research unit should be brought into existence only if a suitable director was available and should be regarded as supernumerary. I can see nothing in these proposals that would be in conflict with the Guy's tradition; on the contrary, they would seem likely to restore a tradition which, if you and Professor Ryle are to be believed, is in danger of passing.

The fact that research was not mentioned as part of the duties of the clinical teachers postulated by Professor Ryle does not mean that they would not do research; they undoubtedly would, but nowadays research is a dangerous thing to talk about. In too many quarters it has come to be regarded as a golden image to be worshipped in some veiled shrine and to be served by a special caste; it has given rise to bitter antagonisms and has divided amicable communities into hostile camps. Mr. Brock's letter, with the main theme of which I am in complete sympathy, points a danger signal. The golden image has, I think, never been set up at Guy's, but we got as far as a plaster cast in the "Reconstruction" after the last war, and the smashing of it produced a mess that is not yet quite cleaned up. Mr. Brock very properly insists that research can be carried out in the ward and operating theatre, and reminds us that Sir James Mackenzie managed to do research in a busy practice; I would go further and say that Mackenzie could not have done his great research unless he had been in busy practice. But Mr. Brock, alas, does disservice to his cause by drawing distinctions between pure clinical research and laboratory research. There is no line here. Clinical research may be carried out in many places; amongst others in the ward, the library, the operating theatre and the laboratory; sometimes it may be confined to any one of these, but commonly it will require the use of several of them. The laboratory is merely a place where more precise observations can be made than can conveniently be carried out at the bedside or where some light may be shed by special investigation on points that must be left obscure by "clinical" observation. No one in his senses would choose an animal for an investigation that can properly be made on man. There seems to be an idea that our forefathers in the last century did not use the laboratory but relied exclusively on "clinical" observation. This is a complete delusion; they used the laboratory to the fullest extent available. My father's dissertation for the M.D. at Aberdeen in 1873 was largely the story of slaughtered guinea-pigs, and I can imagine the withering retort that Pavy would have given to any of his colleagues who had ventured to twit him with the number of test tubes he was breaking; in surgical research Mr. Brock will not have for-

gotten that Lister tried out his ligatures on a calf. As Professor Wright and Mr. Brock agree we want a happy combination of ward and laboratory work, and I suggest that we should all read once more the Memorandum on Medical Education written in 1918 by Sir George Newman, which laid down the fundamental principles on which the units should be based, but which seem now to be forgotten.

I do not altogether agree with Professor Wright in his conclusion about the success of the units. Their primary function was to teach; they were to carry out research because it was accepted that a good teacher must be engaged in some original work; now we are told that they must be relieved of their teaching so that they may do research. Although it is reasonable and right that there should be facilities for those wishing to do research without teaching, this was not the function of units as originally constituted, and Professor Ryle is surely right in regarding the pure research unit as supernumerary. This would be a compromise with Sir John Parsons' view that such units are out of place in an undergraduate school.

If it is wrong to divide research into two compartments marked clinical and laboratory, we must nevertheless recognise that there are two distinct avenues along which research may be pursued, and if only our nomenclature were not so confused by the use of the word "clinical" in so many senses I should like to call these two avenues clinical and academic. The clinical worker's interest is mainly aroused by his desire to solve the problems that present themselves daily in his care for his patients; the academic worker's interest in his patient is merely incidental, his main preoccupation is the academic study of disease. Both attitudes are essential to progress; sometimes, but I think rarely, you find a man who combines the two, but for the most part they do not mix, and the academic worker needs a whole-time post if he is to find full scope for his talent. Professor Wright has dealt convincingly with the need for whole-time posts, but he naturally inclines to stress the academic aspect. Although medical schools are part of a university, their main function is still to turn out good doctors, but with much of our current talk about research we are encouraging an idea among students that to devote oneself to research is to put oneself on a higher plane than those whom Mr. Brock describes as "mere therapeutists." To be a good therapeutist requires as good a brain as to be a good research worker, or so at least I think when I myself am sick.

Yours, etc.,

G. W. GOODHART.

West Cromwell Road, S.W.

Military Medical Service

To the Editor of the GAZETTE

SIR,—To many of us out of touch with Guy's nowadays your "Sector News" has been of great interest, but the sentiments expressed in your last issue by your Pembury correspondent "N. M. J." came as a bit of a shock.

That the British Army at such a time is short of several hundred medical officers, and that the Government is obliged to contemplate conscription is a cause of shame to many of us. It is at best a sad commentary on the voluntary effort of the medical profession and the appreciation of the present emergency.

That, as "N. M. J." informs us, "the specialist ranks are full, and the Services need only medical officers" gives us the clue to one cause of the shortage. One can only infer that the pay and rank of Major, synonymous with that of Army Specialist, is the smallest bait at which a large number of doctors would nibble.

The present system by which all medical officers, irrespective of experience or qualifications, enter as lieutenants is not ideal and entails sacrifices, but such sacrifices are not confined to the medical profession in this war. It is the only profession, except the Church, that enjoys the guarantee of a commission at all.

If nobody is to be expected "to perform duties outside his normal sphere of activities" (I quote your correspondent), how many thousands would find themselves without a place in the war effort! In civil life there are many more would-be surgeons than surgery demands; is it too much for the country to ask that a surgeon called to the Army should undertake the care of a battalion of soldiers as his war job? Even the "M.S., F.R.C.S." mentioned by your correspondent might not have been entirely wasted.

The appointment of one of Guy's most eminent gynæcologists to a military hospital might help to convince your correspondent that there are members of his profession who can "perform duties outside their normal sphere of activities." Or are we to hope for greater consideration for the conscripts?

Yours, etc.,

MAUREEN KELSEY.

The Red House,
Rudgwick,
Horsham, Sussex.

Guy's Reunion Dinner

To the Editor of the GAZETTE

SIR,—It might be of interest to you to know that a very successful Guy's Reunion Dinner was held on Monday, 11th March, 1940. So far as I am aware this is the first Hospital Dinner to be held in the B.E.F.

The Dinner was arranged by Major S. McK. Saunders, R.A.M.C., who had been acting as the D.A.D.M.S. for this area.

The following were present: Colonel G. F. Charles, Army Dental Services; Major S. McK. Saunders, R.A.M.C.; Lieut.-Colonel E. C. Woodhead, R.A.M.C.; Major C. H. Atkinson, R.A.M.C.; Major H. E. Harding, R.A.M.C.; Major F. M. Lees, R.A.M.C.; Lieut. H. Morgan Gray, R.A.M.C.; Lieut. E. W. O. Adkins, R.A.M.C.; Lieut. M. W. Pilcher, Army Dental Corps; Major Windsor Lewis, R.A.M.C.

I think it is worthy of note that Lieutenant Gray, who served in the last war as a captain and was in charge of a hospital, has joined up as a lieutenant in the present war. I hope this splendid effort will soon be remedied by rapid promotion.

A very enjoyable evening was spent, and we hope we have set a happy precedent for other Guy's men who may be grouped in other areas.

Yours, etc.,

B.E.F. WINDSOR LEWIS.

Selection of Rugby Players

To the Editor of the GAZETTE

SIR,—I feel that an explanation is due from the secretary of the Rugby Football Club regarding the team chosen to represent the Hospital on Wednesday, April 3rd.

It is surely unnecessary and in any case undesirable that members of other hospitals should be grafted into the Guy's Hospital side.

Surely, with less effort than was required to obtain these outside players an adequate side could have been raised from our own hospital, and although it might have been defeated it would not have been a disgrace to Guy's Hospital.

Such scant encouragement to members of the Hospital can only lead to a greater spirit of apathy in the future. It is a gratuitous insult to keen players, and, if pursued, might surely lead to a recurrence of the Hospital's dismal record of late years.

Yours, etc.,

"SUBSCRIBER."

Guy's Hospital, S.E.1.

Reviews

Fractures and Other Bone and Joint Injuries. By H. WATSON-JONES, B.Sc., M.Ch.Orth., F.R.C.S. Published by Messrs. E. & S. Livingstone, Edinburgh. Pp. 690. *Price* 50*s*.

THE writings of Mr. Watson-Jones are noteworthy for their high standard of excellence. It is said of specialists, and often with some degree of truth, that they make simple things appear difficult in an attempt to preserve their specialism from the clutches of the general physician or surgeon. Nothing could be less true of Mr. Watson-Jones, and nowhere is his art of clarity and simplification better shown than in the book under review. His lucid style and remarkable gift of drawing pertinent diagrams make all his topics of discussion appear simple, and invariably give the reader a clearer understanding of his subject.

Fractures to-day have assumed a position of great importance. There can be no doubt that there has been, and still is, a lot of bad fracture work carried out. In an attempt to minimise this fracture clinics have sprung up in all the larger hospitals, and their good effects are easy to see. For some obscure reason, however, it has been assumed that the only people capable of directing such clinics are orthopædic surgeons. Mr. Watson-Jones says on page 161 that "The treatment of fractures cannot be divorced from general orthopædic surgery . . ." Your reviewer would like to delete the word "orthopædic" from this sentence. Given the necessary training and interest, there can be no reason why a general surgeon should not conduct a fracture clinic as successfully as his orthopædic colleague. There is equally no reason why any general surgeon should not read Mr. Watson-Jones's book with profit.

The book is divided into six parts with an appendix on the organisation of a fracture service as exemplified by the Liverpool Royal Infirmary. Part I deals with the general principles of fracture treatment, and there can be no criticism of the soundness of the views expressed. The various complications of fractures are considered in turn, and a most interesting chapter is devoted to the author's work on avascular bone necrosis. Part II consists of two chapters on pathological and birth factures. Fractures of the trunk and head, upper

limbs and lower limbs are then dealt with in great detail, and the standard throughout is so high that it is impossible to single out any particular chapter. The book concludes with a description of unusual and instructive cases in Part VI.

Throughout the book the author's experience in his clinic is brought to the fore, and in the light of this experience, the opinions expressed are very dogmatic. It cannot be expected that all these opinions will be accepted by people working in other fracture clinics, but at the same time they will not be carelessly rejected, for they are all exceedingly stimulating. There can be no doubt that this book is the best treatise on fracture treatment so far published, and that it should find a place on the shelves of anyone interested in the subject. The experienced surgeon will undoubtedly learn from it, and for the young surgeon it provides a wealth of theory and practice from which he may obtain a thorough knowledge of the treatment of fractures.

S. H. W.

Textbook of Public Health. By FRAZER and STALLYBRASS. Tenth Edition (revised and enlarged). *Price* 21*s.*

THIS is a comprehensive work by distinguished Liverpool hygienists. It is a volume of 504 pages. The work is founded mainly on Liverpool methods and describes fully the various Public Health services within the control of the Medical Officer of Health of a large county borough. Indeed it goes further and describes some services which Medical Officers of Health have recently been required to administer but which cannot properly be called Public Health services, namely, medical services associated with air-raid precautions and civil defence.

The book is well laid out and the amount of space allotted to environmental hygiene and personal hygiene is suitably proportioned. Each of the 22 chapters deals with a separate subject, and each subject is dealt with clearly and no detail is omitted. While the book generally depicts modern practice in public health, there are some matters to which the ultra-modern hygienist might properly take exception. The disinfection of pens, pencils, etc., in connection with the occurrence of a case of diphtheria in a day school is not now considered necessary, while the wrapping up of the dead body of a person who has died from infectious disease in a sheet soaked in a powerful liquid disinfectant is not modern practice. The method of death certification in which it is stated that the certificate is given to the person who will register the death was altered by Section 6 (2) of the Births and Deaths Registration Act, 1926. The book, however, contains much information, and will be found useful to the medical man who is studying for the Diploma in Public Health. In its present form it cannot be recommended to medical students, as it would be difficult for the medical student to know which parts of the book he should become familiar with and which are outside the scope of the M.B. examination.

The book is exceedingly well printed and the illustrations are excellent. The work has a long history, as it was originally published in 1874 under the title of "Medical Police." This is now the tenth edition of the work, and this fact in itself shows that the book has filled a space in medical literature and has proved popular.

G. F. B.

Physiotherapy in Medical Practice. By HUGH MORRIS, M.D., D.M.R.E. Published by Messrs. Edward Arnold & Co., London. *Price* 12*s.* 6*d.*

THIS book, in a mere 276 pages, succeeds in spanning the complete syllabus drawn up by the Chartered Society of Massage and Medical Gymnastics for their Electrotherapy Examination, Parts I and II. Many a student will be grateful to Dr. Morris for producing an almost complete primer for such a moderate sum.

The introductory chapter, on physical principles, which in similar books is often too technical, is simple and lucid; this standard is maintained throughout. The book is so uniformly good that there is little doubt of its survival. Rather than waste time in further praise, it might be wise to offer a few suggestions for the subsequent editions which are likely to follow.

It takes students a little time to understand what is and what is not "medical electricity." The present table of contents is mainly a list of subheadings. Chapter I should become a main heading; Chapters II to VIII should be included under Medical Electricity; Chapters IX to XIII under High-Frequency Currents; Chapters XIV to XIX under Radiation and Light. There might then follow a very short chapter on Massage which, as such, is not mentioned; an equally short chapter on the Proper Functions and Scope of the Electrotherapeutic Department in the Modern Hospital is also indicated. It would thus be possible to describe, with the prospect of carrying conviction to one's senior colleagues, the adequate and not the nominal treatment of diseases.

The index is excellent, and while the Glossary is long, the following common terms are not defined: combined treatment, diode, Fleming valve, triode, rheobase, photon, sustained oscillations, superimposed currents and Wallerian degeneration.

The very conventional diagram on page 40 could at least have shown our Schnee patient facing his left for once! The equally conventional diagrams of all the motor points, seen on pages 78 and 79, are too complicated. Generally speaking, more diagrams would enable the text to be still further shortened.

I am glad to see that long-wave diathermy is considered unsuitable for acutely inflamed and purulent conditions, and that due regard is paid to its effects in lobar pneumonia. Equally sound teaching is the reminder that it is definitely dangerous to interpose the patient's clothes between the electrodes, lest burns result. These are caused by the uneven concentration of the lines of force as a result of the relative asymmetry between the part being treated and the loosely-applied garment. With a firm dressing or bandage, the danger of this asymmetry is not present.

This book may be highly recommended, and we wish it every success.

H. N. G.

Illustrations of Regional Anatomy (*Section VI, Upper Limb*). By E. B. JAMIESON, M.D. Published by Messrs. E. & S. Livingstone. Second Edition. *Price* 8*s*.

PROF. JAMIESON'S work should prove exceedingly useful both to the student of anatomy and to the surgeon who wishes to refresh his memories of a part prior to operation.

The booklet, like the others of the series, is set out in a regional fashion. The bones of the part are first depicted from several aspects; these illustrations are then followed by dissections showing in order the superficial and the deeper structures.

The pictures are accurate but artificial. The numerous colours used make the illustrations clear and the various structures easy to identify. A few, notibly those of the forearm, are not so clear owing to the multiplicity of detail.

The transverse sections through the joints are particularly instructive, and more of these, representing the rest of the limb, are certainly indicated.

H. C. H.

Conjoint Finals. By G. N. BEESTON. Published by John Bale. Third Edition. *Price* 10*s*.

EACH student has his own particular way of approaching the final examinations. There is no doubt that for many a great clarification of subject matter and improvement in the technique of answering questions can be made by thinking over old question papers. In addition, the relative importance of different subjects, from the examination point of view, is emphasised by the frequency with which some questions are repeated. In the third edition of "Conjoint Finals" by Gerald N. Beeston, all the Conjoint questions set from 1911 to 1937 are classified in such a way that the book provides a useful scheme for revision. It contains no actual information, and so has no value apart from a medium for final revision, but should always fetch a good secondhand price after it has done its work.

E. F.

Handbook for Dental Nurses. By CULLINCH. Published by John Bale.

THIS book presents, at a price which its binding hardly seems to justify, a masterly exposition of the obvious. The author includes a chapter impregnated with the high ideals of nursing, which could only have been written by someone not a nurse. Those of us who have been both dental and hospital nurses will be glad to know that we are "looked up to by the working classes" and have an "equality with the nobility"—doubtless very gratifying knowledge in a changing but still class-conscious world.

Apart from this excursion into the social side of nursing, the duties of a dental nurse are explained with such verbosity that any essential facts present are by no means apparent at a first reading. Perhaps the author was unlucky with his nurses. There is a note of disillusion in his admonition not to say "Cheerio" or "Bye-bye" on the telephone; his desire that the nurse should be free from blood and inkstains has, one feels, some justification.

On the other hand, his periodical demands to patients to revisit the scenes of their former extractions lack charm. Perhaps, however, this is a north-country practice. Taken as a whole, this book need not have been written. A very enthusiastic dental nurse might, after diligent study, find it of some slight use. She would learn far more in a week's work with an irritable dentist.

S. S.

Hygiene for Nurses. By GUY and LINKLATER. Published by Messrs. E. & S. Livingstone. *Price* 5*s*.

HERE we have an adequate handbook of hygiene for nurses in training, dealing with such diverse subjects as personal hygiene, public health and parasites. We have the old diagrammatic friends of our youth, the ventilating systems of the universal Sherington and Delturney, the soil pipe, and, of course, the water seal (non-zoological). But where is the sewage farm of

earlier days? Shrunk, sad to say, to a small and complicated diagram; for sentimental reasons we are sad to see it go, but, apart from personal feelings, an extensive knowledge of the municipal sewage system is, after all, of small practical value to a nurse.

The chapter on infectious diseases especially is of use for reference purposes, although a table of incubation periods and similar data might profitably have been included. Foods, heating, lighting and ventilation are comprehensively conned, the appendix contains a useful selection of examination papers in the possible shape of questions to come, and there is an inspired drawing of a loaf.

S. S.

Elementary Bacteriology and Immunity for Nurses. By STANLEY MARSHALL. Published by Messrs. H. K. Lewis & Co., Ltd. *Price* 3*s.* 6*d.*

THIS handbook of bacteriology should prove of value to any student nurse. It is divided into three main parts. The first deals briefly with general bacteriology and the second with the dissemination of organisms and immunisation. The third section is perhaps the most useful, since it describes the special tests and the more common laboratory investigations.

There is a table of useful normals to memorise which should save enthusiastists from several pitfalls, and as the average nurse appears to be conversant with the Wassermann test only, is vaguely aware that there is some difference between a serum and a vaccine, and is completely blank as to any other possible clinical investigation, this book may help to bridge an untidy gap in nursing knowledge.

S. S.

Surface Anatomy. By W. E. ROBERTS, M.R.C.S., L.R.C.P. Published by Messrs. Angus & Robertson. Pp. 93. *Price* 7*s.* 6*d.*

DR. ROBERTS'S monograph needs no apology; its subject is important, it is presented in an attractive form and is quite accurate. The photographic illustrations demonstrate the features in their true perspective, but the superimposed structural outlines might be less confusing if a system of colours were introduced. The descriptions are so arranged that they lie adjacent to the diagrams and so eliminate the aggravating necessity of back reference.

The book is arranged in two sections; the last section, being without diagrams, could be incorporated in the first part or even omitted entirely without detracting from the real value of the book. For anyone who is not a master of the subject this book will be found most agreeable and useful.

F. N. G.

Elementary Pathological Histology. By W. G. BARNARD. Published by Messrs. H. K. Lewis & Co., Ltd. Second Edition. *Price* 10*s.*

THIS very valuable little book has been revised and three coloured plates added. It remains essentially an elementary book, designed to aid the student during his first month's association with the histological study of morbid processes. The author stresses this point and emphasises above all that pathology is made up of living, if abnormal, processes. Macroscopical specimens and microscopical sections are but isolated examples selected largely at random at different stages from the continuous moving screen of the pathological picture.

The book is intended to be an aid to practical work, in association with lectures and reading; the text is purposely brief, shortly describing the accompanying plates; 181 actual photographs of microscopical sections are depicted—they adequately cover the range of the more common pathological conditions. The photographs are clear, but are not unduly touched up, and bear a sufficient resemblance to the view actually seen under the microscope to be of definite assistance to the student. They lack the colouring of the projector microscope and the screen, just as the text must lack the personal appeal of the demonstrations we enjoyed before the practical class. Even so, the book is of very definite value; as examinations approach, moreover, it will serve for the rapid revision of the general pathological histology of the tissues.

N. A. N.

A Guide to Ophthalmic Operations. By J. B. HAMILTON. Published by Messrs. H. K. Lewis & Co., Ltd. *Price* 10*s.* 6*d.*

THIS is not, nor was it intended to be, a book with a wide appeal. But it is eminently useful to those who, doing general surgical work regularly and ophthalmic work only infrequently, see but few operations.

It is primarily a catalogue of pre-operative medicaments, instruments and post-operative treatment. As such it is useful, but its scope might well be increased. The theatre nurse in a general hospital, where training requirements seem to need such frequent changes in personnel, is seldom expert. As soon as she appears to be beginning to learn her job she is transferred to another department to make way for the next seeker after knowledge. Like all of us then, she is still learning. She will usually not only lay the instrument trolleys but also supervise them at

operation. Here is what Mr. Hamilton has omitted. If there were short notes of the operations and some indication of the order and exact step in which the instruments are required, this book would be bulkier but really complete. To the inexperienced house surgeon assisting at these operations they would be invaluable. And these two people should be the ones to make use of this book.

As far as the pre-operative treatment is concerned, one again suffers from the multiplicity of the drugs which may be necessary. If some distinction could be made between those drugs which will always be used and those that must be available, speedier technique will follow, and it would be a great help to the beginner of either profession.

The actual text in the ground it covers is then all-embracing and more than adequate. And in association with the Weiss 1934 catalogue of instruments and its many pictures, recommended by Mr. Hamilton, this book is worthy of a place in all theatre libraries.

C. L. T. M.

Aids to Forensic Medicine. By J. H. RYFFEL.

WE may deplore the principle of the "Aids" series; in particular might we writhe over the attempt to compress such a live and attractive subject as Forensic Medicine into a confine which permits the display of no more than the mere skeleton. We must, nevertheless, admit the facts—there is a student public for this type of cram. "Aids" have weathered many years with success, and we foresee that Ryffel's name and sage experience as Home Office Analyst will contribute in no small measure to a further lease of life for the Forensic Medicine number. As is to be expected, the toxicological section has absorbed most of the revision given to this new edition, the general substance remaining much as before.

Ryffel and Roche Lynch are the sole exponents of Forensic toxicology in this country, and we may surely permit ourselves the wish that before long Dr. Ryffel's mature experience in this subject may find reflection in the more distinguished medium it deserves.

Sport

Rugby

Guy's v. University College Hospital and Cardiff Medicals

(*At Honor Oak Park on Saturday, February 24th*)

FOLLOWING their success against Oxford University, Guy's played excellent football and had no difficulty in defeating the combined University College Hospital and Cardiff Medicals by 5 placed goals (25 points) to a placed goal (5 points).

Both sides played an open, attractive game, and it was good to see Babrow and Kynaston in such good form. In the first minute, Kynaston made a fine opening for Crawford, and only a brilliant tackle by Latto, the visitors' full-back, prevented a score.

Excellent passing movements followed and, following an attack by Guy's, Ebsworth hit the upright in a good attempt to drop a goal. Keeping up the pressure, Guy's made another grand attack via Ebsworth and Gartrell, which Babrow finished off with a try behind the posts, which Mullins converted.

The visitors retaliated almost immediately, when Latto followed up a long penalty shot, charged down Lewis's kick, and scored a try, which Rosso converted.

Good work by Darke, Bulstrode and Mullins carried play to the other end of the field, but just when Guy's appeared likely to score, they were penalised for not playing the ball. However, Lewis pulled up an attack in Guy's 25, and started a splendid movement between Babrow, Kynaston and Crawford, who made a run of 30 yards before he was checked a few yards from the line.

Lewis got the ball away from a loose scrum and the centres made another good opening for Gartrell, who crossed for a try and Mullins obliged with the goal points.

For a time University College Hospital pressed and the Guy's line appeared to be in danger when Lillywhite punted ahead, but Babrow managed to clear, and eventually sent Gartrell away at top speed, but the latter knocked on with the line at his mercy.

On two occasions Crawford was given chances to score, but he was closely marked and was allowed very little latitude.

Guy's started the second half confidently and increased their lead almost from the kick-off. Kynaston broke through and Babrow accepted the final pass, scored, and Mullins kicked a fine goal from a difficult angle.

A little later Crawford made amends for his earlier efforts when he made a spectacular run,

and finally sent Babrow over for another try behind the posts, and again Mullins converted.

Darke was in magnificent form and got through a tremendous amount of work. Following one of his interceptions, he sent Sharps and Gartrell away at top speed, and Kynaston crowned another fine movement with an equally fine try, and Mullins completed a grand afternoon's work by kicking another goal from a difficult angle.

University College Hospital missed an easy penalty goal, and near the end Darke made another spectacular run, only to be robbed of the ball five yards from the line.

Team.—T. L. T. Lewis; P. C. Gartrell, L. Babrow (captain), R. U. F. Kynaston, J. P. Crawford; J. S. Ebsworth, W. J. Lewis; J. P. Rochford, H. F. Osmond, D. N. Fuller, J. R. D. Williams, J. C. Bulstrode, C. S. Darke, M. R. Mullins, R. M. Sharpe.

Guy's v. London Hospital

(*At Honor Oak Park on Saturday, March 1st*)

LONDON surprised Guy's, and after a poor game won on their merits by 2 tries (6 points) to nil.

Guy's were not at full strength, and missed the services of Babrow, Darke and Lewis.

Many passes went astray and neither back divisions combined well. Guy's in particular failed to get into their stride and, although the formation of the three-quarters was altered after the interval, there was little improvement.

London held the initiative in the first half and, after thirty minutes' play, Whitworth, their scrum-half, went over for a try, but Robinson, who struck the upright, failed to convert.

After the interval Guy's attacked frequently, but their finishing was poor and many chances were thrown away.

London held their own, and near the end Page, one of their forwards, forced his way over the line to make victory sure.

Team.—R. L. Skea; D. W. F. Charlton, J. P. Crawford, R. U. F. Kynaston (captain), P. C. Gartrell; J. S. Ebsworth, W. J. Lewis; J. P. Rochford, H. F. Osmond, D. N. Fuller, J. R. D. Williams, J. C. Bulstrode, D. P. Finnegan, T. W. Renton, R. M. Sharpe.

Guy's v. The Hogs

(*At Honor Oak Park on Wednesday, March 6th*)

THE Hogs made several last-minute changes and, although the Hospital lacked the assistance of Osmond, Kynaston, Lewis and Gartrell, they played attractive football and won easily by 3 placed goals and 4 tries (27 points) to a penalty goal (3 points).

P. D. V. Harrett, a freshman from Llandovery, made his first appearance for the Hospital, and proved an ideal partner to L. Babrow.

The Hospital forwards had the ball from most of the scrummages, and J. C. Bulstrode and M. R. Mullins led several strong rushes. The visitors' pack more than held their own, and had they been better supported by their backs the result might have been different. However, D. N. Bryceson, normally a forward, tackled well on the wing, but Crawford and Charlton were too fast for their opponents.

In the first half Crawford (two) and Charlton scored tries for Guy's, one of which Mullins converted, and Kenyon kicked a long-range penalty goal for the visitors.

After the interval the Hospital proved too strong for their opponents, and Crawford, Lillywhite (two) and Harrett added further tries, two of which were converted by Mullins and Bulstrode respectively.

Team.—R. L. Skea; D. W. F. Charlton, W. H. Lillywhite, H. L. Joyce, J. P. Crawford; L. Babrow (captain), P. D. V. Harrett; R. M. Sharpe, D. N. Fuller, J. P. Rochford, J. R. D. Williams, J. C. Bulstrode, M. R. Mullins, D. W. Burnford, P. W. Edwards.

Guy's v. London Welsh and London Irish

(*At Honor Oak Park on Saturday, March 9th*)

THIS match attracted a large attendance and, after a very exciting game, Guy's won by a placed goal and 2 tries (11 points) to a try (3 points).

The result was actually in doubt until the last few minutes, when Babrow, the Hospital captain, followed up a kick ahead and dribbled half the length of the field and crossed the line, but failed to touch down when tackled by Dillon, the full-back. Fortunately, Kynaston was at hand to score the try which made victory secure.

Until then, the combined Irish and Welsh forwards had dominated most of the second half, and time and again threatened to score from loose rushes. The Hospital backs, however, had been given enough chances in the first half to secure a commanding lead, for their forwards heeled from most of the set scrummages. P. D. V. Harrett at scrum-half was in grand form and started several good movements, which, however, broke down through hurried passing from the centres to the wings.

Considering the big advantage in weight held by the visitors' pack, Guy's forwards did well to

gain the better of the set scrummages, and, though they lacked the fire of their opponents, they were well served in the loose by Mullins, Albers and Williams.

Mullins was at his best and showed surprising speed in backing up Babrow and Harrett to score the Hospital's second try, which Kynaston converted. Babrow scored the first try for Guy's early in the game, and the London Welsh and London Irish replied with an unconverted try scored by Walters.

Near the end James nearly equalised for the visitors when he made one fine run, only to spoil a certain try by a forward pass.

In the last stages of the game Kynaston scored the final try referred to above, and soon afterwards the whistle sounded for no-side.

Team.—R. L. Skea; P. C. Gartrell, W. H. Lillywhite, R. U. F. Kynaston, J. P. Crawford; L. Babrow (captain), P. D. V. Harrett; J. P. Rochford, R. M. Sharpe, D. N. Fuller, J. R. D. Williams, J. C. Bulstrode, D. P. Finnegan, A. G. Albers, M. R. Mullins.

Guy's v. St. Mary's

(*At Honor Oak Park on Wednesday, March 20th*)

AFTER an even first half, St. Mary's overwhelmed Guy's and won convincingly by 2 placed goals, 2 penalty goals and 2 tries (22 points) to 2 penalty goals (6 points).

The conditions were ideal and the large crowd present saw an interesting game, full of good football from start to finish.

Unfortunately, Guy's were not at full strength as Osmond and Lewis were on the sick list and Gartrell was unable to make the journey.

With the wind in their favour Guy's attacked from the kick-off and St. Mary's were kept on the defensive, but their tackling was sound and covering-up was excellent.

The visitors fielded a strong pack, but, although Guy's were much lighter, their forwards more than held their own.

Mullins, Bulstrode and Darke got through a tremendous amount of work, and as the game developed it reminded one of a typical hospital cup-tie.

Both sides went all out and never relaxed for a moment. Clever play by Harrett followed by some fine kicking by Babrow and Van Steytler drove the visitors back to their own half, and eventually Guy's took the lead when Mullins landed a grand penalty kick from near the touch-line. A little later Mullins repeated the effort, and Guy's kept a lead of six points until a minute from half-time, when the visiting forwards carried out two strong rushes to Guy's 25, and then a penalty for offside enabled Graham-Jones to kick an easy goal.

After the interval it was clear that St. Mary's had been reserving themselves for the second half, and their backs were prominent almost from the restart.

Jacklin began to get the ball from most of the scrums, and Kemp and Graham-Jones, who were chiefly responsible for their side's success, began to find gaps in Guy's defence and were over the line before anyone could lay hands on them.

Guy's had a bad period for twenty minutes, when Graham-Jones, Campbell, Reynolds and Kemp scored tries, two of which were converted by Graham-Jones, who also kicked a penalty.

Near the end Guy's rallied splendidly and fought gallantly to the end, but, although the backs carried out some excellent movements, they were not favoured with good fortune, and on two or three occasions certain tries were missed through movements going astray at the last minute.

The result was a disappointment to followers of Guy's, but St. Mary's have a well-balanced side and fully deserved their success.

Team.—R. L. Skea; D. W. F. Charlton, L. Babrow (captain), R. U. F. Kynaston, J. P. Crawford; J. van A. Steytler, P. D. V. Harrett; D. P. Finnegan, R. M. Sharpe, C. S. Darke, J. R. D. Williams, J. C. Bulstrode, T. W. Renton, G. A. Albers, M. R. Mullins.

Guy's v. Gloucester

(*At Gloucester on Saturday, March 23rd*)

OWING to the holidays Guy's were well below strength for their away match with Gloucester, and were beaten by a dropped goal and 5 tries (19 points) to a penalty goal and a try (6 points).

Carpenter, the Gloucester hooker, was in grand form and, assisted by a powerful pack, he secured the ball from most of the earlier scrums. The result was that the home side held a strong territorial advantage, and eventually Bown, who was an elusive stand-off half, soon scored the first try for the City.

Hudson, one of the best forwards on the field, snapped up another, and then Guy's scored their only try, but it was a beautiful piece of work. Van Steytler broke through and the ball travelled to Charlton, who cut inside and passed to Mullins, who threw out a long pass to Lillywhite, and the latter finished off the movement with a fine try.

The home forwards were always on the ball and their strong play was a feature of the game.

Before the interval Thornton scored a try, Stephens kicked an easy drop-goal, and at half-time Gloucester were leading by ten points.

Any likelihood of a recovery by Guy's disappeared when they resumed without Joyce. However, they never gave up trying, and the backs, supported by the forwards, carried out some splendid movements. In fact, short passing between the forwards was excellent, but not quite good enough to score tries.

Following a forward dribble, Moreland put the home side further ahead when he crossed for a try, and Hudson followed suit a little later, but neither try was converted.

Guy's contested every yard and had their full share of the game. Just before the final whistle they were awarded a penalty, and Mullins kicked a splendid goal from a difficult angle.

Team.—C. Halamandres; D. W. F. Charlton, R. U. F. Kynaston (captain), W H Lillywhite, J P. Crawford; J. van A. Steytler, P. D. V. Harrett; J. P. Rochford, H. F. Osmond, D. P. Finnegan, J. R. D. Williams, J. C. Bulstrode, H. L. Joyce, A. G. Albers, M. R. Mullins.

Cross Country Running

GUY'S recaptured the "Kent-Hughes" Inter-Hospitals Cup from Bart.'s at Richmond on Wednesday, March 13th. There were twelve representatives from Guy's; much of the credit for this is due to H. C. Martin, who raised a large team at Pembury and arranged the training.

This year we were without Etheridge and Lyon, who had helped in so many previous wins. However, Martin finished fourth, equalling his best performance in the race of two seasons ago. W. A. Porter, who had never previously been in the winning team, displayed greatly improved form and followed Martin home. His success is largely due to consistent training. A newcomer, P. Sartory, ran very well to finish seventh, but J. Merryweather, tenth, and B. Griffin were both disappointing and much below their usual form.

The individual winner was the former Cambridge captain, B. F. Brearley (St. Mary's), who beat Haile, of Bart.'s. He covered the five miles in 28 minutes 10 seconds, and established a new record for the course.

Result.—Guy's (4, 5, 7, 10, 14), 40 pts.; St. Bartholomew's (holders), 47 pts.; Royal Dental, 92 pts.; London, 41 pts.; St. Mary's, 128 pts.

The United Hospitals Hare and Hounds

DESPITE war conditions and evacuation, the Club has maintained its facilities for the training of hospital athletes and the entertainment of its many members. The captain and secretary are to be congratulated on their success with regard to the arranging and support of the matches.

The United Hospitals side has been very strong and has scored win after win. Haile, of Bart.'s, has been outstanding throughout the season, but Griffin (Guy's) has carried his weight to advantage. W. R. Porter was in good form in the Kent-Hughes's. Many of the Guy's team, because they were evacuated to Pembury, were unable to take part.

It is hoped that the Club will be able to continue again next season if support is still available.

D. J. L.

Hospital Information, etc.

Nursing News from all Fronts

Miss Betty T. Boult, serving with the Q.A.I. M.N.S. in India.

Miss Barbara Boyle, H.M. Hospital Ship *Vasna.*

Miss Dilys E. C. M. Jones, serving on H.M. Hospital Ship *Vasna.*

Miss Marie P. McManus, serving with the Q.A.I.M.N.S. in India.

Miss R. C. Shackles, Miss N. Singleton, Miss P. Usher-Wilson and Miss B. M. Wood, The Military Hospital, Bath.

Miss M. S. Lomax, 19th Casualty Clearing Station.

Notice

SOCIETY OF APOTHECARIES OF LONDON

Dates of Examinations

Surgery.—June 10th, 12th, 13th.
Medicine and Forensic Medicine.—June 17th, 19th, 20th.
Midwifery.—June 18th, 19th, 20th, 21st.

Pass List

UNIVERSITY OF LONDON.
SECOND EXAMINATION FOR MEDICAL DEGREES.
March, 1940.

T. M. Ball
D. M. Carnegie
E. G. Cook
O. M. Jonathan
R. I. McCallum
I. S. MacLeod

G. M. Coupland
F. G. B. Dodd
J. T. Doyle
R. N. M. Eminson
G. M. Evans
C. M. F. Fiducia
W. Fox
D. L. Gullick
W. Haigh
J. Hart
R. D. C. Hart
I. D. Henderson
J. F. Horley
R. H. Hughes
W. H. Humphreys
A. C. Macrae-Gibson
D. R. I. Mason
J. A. Nissim
R. T. Parkin
A. M. Rajah
T. L. Reeves
D. Rosenberg
A. J. Shillitoe
G. R. M. Sichel
G. F. Swann
D. J. Tibbs
E. A. Williams
L. P. J. Wright
C. J. Zerny

The following Students have now completed the Examination under the Old Regulations by passing in Pharmacology :—

T. Koonvisal
J. M. Munden
C. H. Watts

CONJOINT BOARD.

April, 1940.

Pathology.

B. J. Fowler
J. E. Gilbert
R. A. Gill
G. E. McFall
J. A. Williams

Medicine.

*J. P. Crawford
A. M. Dawes
D. N. Fuller
*J. Gordon
*F. L. Ingram
B. D. L. Johnson
*G. O'Gorman
A. E. Ram
D. B. Roberts
P. A. L. Roberts
*F. S. W. Shute
*R. P. Strang
*T. C. Thorne
*J. M. W. Wells
*J. R. D. Williams

Surgery.

*L. Babrow
*O. H. E. Bayles
J. V. Braithwaite
J. C. Bulstrode
*P. R. Cooper
A. G. C. Cox
*F. M. Hayes
*H. P. Guerrier
*T. S. Leedham
*D. H. Meldrum
R. P. Mills
*M. C. Mundle
*D. M. Nundy
*G. O'Gorman
C. W. Peck
*F. S. W. Shute
*W. H. Spencer
E. R. Roseveare
W. F. J. Weston

Midwifery.

G. J. Amiel
*L. Babrow
E. W. Crews
E. B. Dawe
J. W. Graves-Morris
R. M. de Gregory
R. T. Hinde
H. P. Jones
H. L. Joyce
F. Kohn
R. U. F. Kynaston
F. R. C. Manning
*M. C. Mundle
S. Muntarbhorn
P. S. Norris
L. Rendell-Baker
R. E. Rewell
R. J. Stanley
J. G. Stubbs
P. N. Swift
St. J. M. A. Tolhurst
D. P. Walther
W. R. Watson
P. C. Van der Westhuizen
S. Wetherell

* Have now completed the examination.

Papers by Guy's Men

Behrman, S. Recent advances in the study of polyneuritis and its treatment. *Practitioner*, 1940, cxliv, 388.

Bradlaw, Robert. The histology and histopathology of the dental innervation. *Dent. Rec.*, 1940, lx, 97.

Bishop, P. M. F., and Others. Œstrogenic properties of Stilbœstrol Dipropionate and Hexœstrol. *Lancet*, 1940, i, 629.

Campbell, Maurice. Angina pectoris and coronary thrombosis : II.—Treatment and prognosis. *Clin. J.*, 1940, lxix, 85.

Eckhoff, Nils. Acute subdural hæmatoma. *Lancet*, 1940, i, 689.

Changes of Address

H. M. Brown, Major, R.A.M.C., D.A.D.M.S., Portsmouth Area, Government House Portsmouth, Hants.

L. C. Cohen, Capt., A.D. Corps, Chichester.

E. I. Davis, Flying Officer, R.A.F., Uxbridge.

E. E. Gibson, Lt. A.D. Corps, c/o Lloyds Bank, 6, Pall Mall, S.W.1.

T. A. B. Harris, Major, R.A.M.C., Tidworth, Hants.

F. C. Hunot, Surg.-Capt., R.N., H.M. Hospital Ship *Vasna*, c/o G.P.O., London.

D. Lennie, Surg.-Lt. (D.), R.N.V.R., c/o The Admiralty, S.W.1.

H. F. Lunn, Lt., R.A.M.C., Aldershot.

G. B. Palmer, Capt., N.Z.M.C., 5th Field Ambulance, 2nd N.Z.E.F.

F. W. Sander, Lt., A.D. Corps.

Peter Wilson, Flying Officer, R.A.F., Cranwell.

C. F. H. Bulow, L.D.S., R.C.S., 25, Cedar Road, Sutton, Surrey. *Vig.* 4821.

Frank S. Krusin, M.R.C.S., B.D.S., 53, Portland Place, W.1. *Welbeck* 6308.

E. M. Mahon, M.R.C.S., L.R.C.P. 1, Berkeley Court, Baker Street, N.W.1. *Welbeck* 9412.

John K. Reeve, M.R.C.S., L.R.C.P., 27, Warminster Road, S.E.25. *Livingstone* 1720.

Appointment

H. N. Garrus, M.A., L.R.C.P., M.R.C.S., Assistant Hospital Officer to No. 4 (Eastern) Region, at Cambridge.

Engagement

BULOW—HOOD.—Charles Frederick Harold Bulow, of Sutton, Surrey, to Doreen Muriel Hood, of Sutton, Surrey, December 20th, 1939.

Deaths

COX.—On April 9th, 1940, at Brighton, Arthur Neville Cox, M.D., M.R.C.P., for twenty-seven years Tuberculosis Officer at Brighton, aged 53.

HUNTER.—On April 5th 1940 at 14*a*, Alexandra Villas, Brighton, 1, P. Douglas Hunter, M.R.C.S., L.R.C.P.

STAINTON.—On March 24th, 1940, as the result of a motor accident near Cape Town, South Africa, Surgeon-Lieut. Philip Geoffrey Stainton, M.R.C.S., L.R.C.P., R.N.

EDS. { N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

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Volume LIV — *4th May* 1940 — *Number* 1351

PASSIM

THE question of the provision of adequate clinical teaching for the students of this Hospital has been one of the major problems which have confronted the authorities since the outbreak of the war. The first problem to be faced was that of the diminution of available material at Guy's itself and the evacuation of students to the base hospitals, which had never been teaching centres. This was solved by the dint of much hard organisation and by the effective co-operation of the staffs of the hospitals concerned. There was naturally some time-lag before effective teaching became a practical proposition, but an ever-increasing number of cases are now transferred direct from the Out-Patient Department to the bases, and our honorary staff and junior staff have ample clinical material on which to base their rounds. The proud achievement claimed in our last Pembury letter must be a great encouragement to those who have organised this policy of decentralisation.

The second problem was that of the provision in wartime of lectures and of laboratory facilities comparable to those enjoyed in happier days. Duplication or triplication of lectures is both costly and wasteful; laboratory facilities for the student at the base hospitals are impracticable without enormous expense. For these reasons, it has been found most advantageous to arrange this part of the training at the parent hospital itself. The provisions for hæmatological studies in the Bacteriological Department were very early afforded; next, somewhat naturally, a very thorough series of revision classes was organised. Practical classes and lectures in pathology soon followed, and we are very pleased to announce that the next series of clinical lectures has been arranged and is to commence on Monday next. Moreover, the Clinical Laboratory has been reopened in full, and a room in the Bacteriological Laboratory has been reserved for the use of students who desire to make simple observations of smears and specimens.

Thirdly, and perhaps most serious of all, the needs of the Armed Forces have already taken from us several of our honoraries and have depleted the junior staff. Those of the senior staff who remain have to bear the brunt, both in private and in hospital, on teaching rounds and in Out-Patients for those who have been called away. Thus, at Out-Patients, for instance, the number of new cases to be seen in so great as to render impossible the detailed examination, cross-questioning and discussion which is so valuable to the clerk. There is no lack of clinical material, and we are fortunate in that five teaching rounds at least are done in the medical wards alone each week. The combined round has again become an institution, to stimulate our intellectual faculties and to make us think before we speak. Finally, Professor Ryle is to visit us weekly to deliver a lecture and to take a ward round; we shall warmly welcome his reappearance in the wards the more especially in view of our recent correspondence upon this subject of clinical teaching.

This problem of clinical teaching in war-time is one of national importance, and we do not apologise for stressing the way in which it has so far been solved. We are very insular-minded, and it would be easy these raidless days to concentrate upon domestic matters to the exclusion of the holocaust outside. We are satisfied, however, that our organisation as a sector under the E.M.S. is under constant review by watchful eyes, and only this last week a new drive for the more effective "blacking out" of the Hospital was begun. As a further reminder of the strenuous times in which we live, we reproduce on another page a photograph showing the arrival of the first convoy of soldiers at Orpington.

Obituary

A. NEVILLE COX, M.D., M.R.C.P.

BY the death at Brighton on April 9th of Dr. Arthur Neville Cox, Guy's has lost a distinguished son. As a student he obtained a junior science scholarship, and the Golding Bird gold medal and scholarship in bacteriology. He qualified M.B., B.S. (Lond.), in 1910, and later took his M.D. and M.R.C.P.

At Guy's he was Sir Charters Symonds's last and Mr. Steward's first house surgeon, and was afterwards obstetric resident, and for some time edited the *Guy's Hospital Gazette*. Leaving Guy's with the intention of entering the newly-formed tuberculosis service, he served as house physician at the Brompton Hospital, and was afterwards appointed tuberculosis officer for Brighton and physician to the Brighton Sanatorium, a post which he held until his death.

Bringing to his work a constant enthusiasm and an outstanding ability, Neville Cox was soon recognised as one of the best tuberculosis officers in the country, and his opinion and advice were widely sought after. During the war he was a temporary captain in the R.A.M.C., and among other posts which he held were the presidency of the Brighton and Sussex Medico-Chirurgical Society in 1933 and 1934 and the secretaryship of the Tuberculosis Society.

Neville Cox was a loyal and popular old Guy's man, and although handicapped throughout his life by severe asthma, he did much to organise and maintain an efficient tuberculosis service at Brighton, where his loss will be greatly felt. His never-failing sense of humour and the enjoyment he had in a particularly happy family life enabled him to maintain an optimistic outlook, in spite of much ill-health, which was the admiration of his friends. His philosophy of life was simple, and his habit to make the best of everything, with the result that he created happiness both for himself and for those around him. One of his favourite hobbies was the carving and playing of reed flutes, at which he had considerable skill, and during a long period of recent illness in Nuffield House he usually had one or more tucked under his pillow.

Those of us who enjoyed his friendship will miss him sorely. His own peculiarly dry wit, his generous appreciation of others, and his wide reading made him the best of companions, and we shall cherish his memory. To his widow, herself an old Guy's nurse, his three sons and his daughter we extend our deep sympathy in their great loss.

The Diagnosis of Diseases of the Skin

By David Erskine, Esq., M.D., D.P.H.

DERMATOLOGY is frequently considered to be an obscure branch of Medicine, and those who approach it with this impression may quite easily fail to appreciate the simple principles on which the subject is built.

The various eruptions which occur are often cloaked in a complicated terminology, which may largely be responsible for many of the difficulties experienced by the student. On analysis, however, these names are found only to be a description of the lesions present, made austere by their classical derivations, and should with a proper interpretation only serve to make the study of skin diseases more simple. Dermatology differs from most other branches of Medicine by demanding the application of Visual Memory and analytical observation of the particular lesions in every case. In no other conditions can one so readily observe the lesions present—and the success or failure of treatment! It is only by seeing frequently the many different skin diseases which attend the Out-Patient Departments and by the cultivation of visual memory that one can become competent in diagnosis. In this respect it should be stressed that no pictures, however good, can properly replace the study of actual cases with that little, and often essential, difference that points to the correct diagnosis.

To the beginner all skin diseases look very much alike, but an effort should be made to note the shade of colour, size and shape of the lesions present—whether they are dry or moist, and whether the surface is rough, smooth or covered with scales. Skin manifestations may be of several orders: Erythema is a generalised flushing of the skin; a Macule is a localised patch of ery-

thema ; a Papule is a macule which is raised above the surface—Tubercles and Nodules are larger papules, while a Plaque is a still larger and flattened papule. Vesicles are minute clear blisters ; larger vesicles are known as Bullæ. Pustules are vesicles which contain pus ; either may break down and form an Ulcer, which may form a Scab by the drying of surface secretions. Scales are desquamating dried epithelium. Most skin diseases are made up of one or more of these lesions, and the final picture should be memorised and "labelled" with the diagnosis.

In arriving at this diagnosis, it will be helpful to know from the patient whether the eruption irritates or not, and confirmation may sometimes be found in linear scratch marks on the body. It is also important to know how long the eruption has been present and whether a similar eruption has occurred previously. Treatment may mask the typical appearance of any lesion so that information on this point should always be sought while considering the diagnosis. The distribution of the eruption is of special importance, as some diseases occur on special areas of the body ; other diseases, such as acne, occur at certain ages, and, again, the patient's occupation may give the clue to the probable diagnosis. These latter points indicate the value of a brief history in all cases.

It is well to remember that many diseases of the skin are not primarily diseases of local structures, but are external manifestations of internal derangements ; so that in all but the most obvious local diseases, such as epidermophytosis, further investigations may be necessary to arrive at a correct diagnosis and to control the precipitating cause. As an example, dermatitis of the lip may be due to a nasal catarrh and will not clear up permanently until the catarrh has been relieved ; or again, Rosacea, which is believed to be associated with a loss of gastric tone, will not respond to local treatment until the underlying condition is improved. Focal sepsis is often found to be associated with skin eruptions and general diseases such as leukæmias have their skin manifestations which call for further investigation before an accurate diagnosis of the skin lesion can be made.

As a rule, symmetrical lesions suggest conditions of internal origin while unilateral lesions often develop as a result of external causes. Lesions localised to the exposed areas suggest sensitivity to external factors such as sunlight or occupation. Artificially produced lesions are sometimes encountered, and these can usually be recognised by their irregular appearance and their distribution, and by the fact that they do not conform to any recognised dermatological lesion.

Certain diseases have a tendency to appear in special areas, and the cultivation of the visual memory will make the diagnosis of these conditions more simple. The differentiation of Scabies from other vesicular lesions is easier when the typical distribution of the infestation is appreciated ; these lesions are often grouped between the fingers, around the wrists, elbow, anterior axillary folds, etc., while other similar conditions are more generally scattered over the body. Pustular acne has a marked tendency to be limited to the back and the face. Lupus erythematosus often involves the nose and the malar region of the face. Typical lichen planus lesions are found most commonly on the medial sides of the forearms and thighs, with associated lesions in the mouth. Erythema multiforme occurs on the face, forearms, hands and legs, and there may also be small ulcers in the mouth which lend some support to a provisional diagnosis. These are but a few examples which indicate the help in diagnosis which may be obtained from a consideration of the typical distribution of a particular skin disease.

It will be found that the dermatologist makes use of many investigations in considering the diagnosis of the more obscure types of eruption. The reaction and abnormalities in the urine, biochemical examinations of the blood and complete blood pictures are frequent routine tests which may, at least, give confirmatory evidence in many conditions. Sometimes the contents of a bulla or a pustule are cultured ; scrapings of a lesion are softened in potassium hydroxide and examined microscopically for fungus. Pieces of involved skin may be removed for section, and in certain conditions diagnostic histological changes are found. Intradermal tests are made, especially on suspicion of streptococcal or tuberculous sensitivity. By the help of selected investigation on these lines, it is frequently possible to make a confident diagnosis when the skin manifestations are not sufficiently characteristic to provide the necessary evidence.

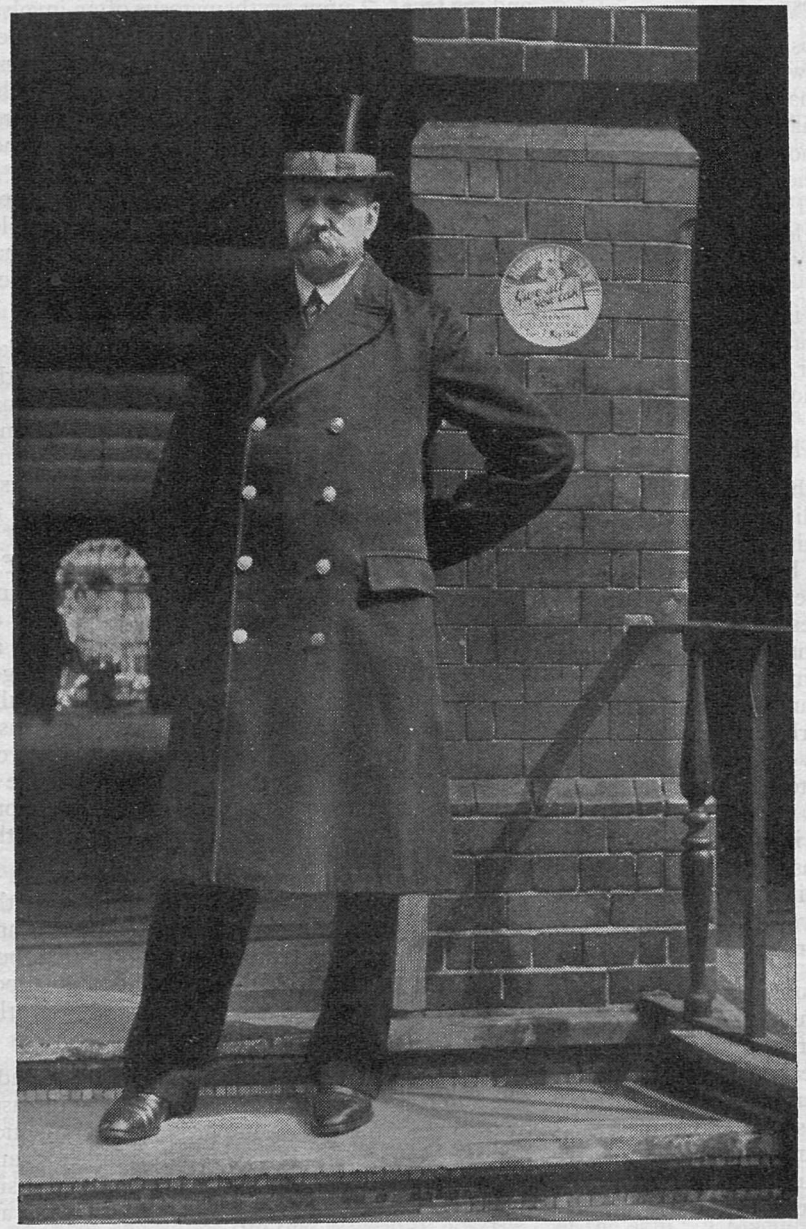
Finally, it is wise to be on the look-out for the acute infectious fevers. General malaise and pyrexia will often give the necessary warning, but, unless this snag is recognised, modified smallpox might be diagnosed as acne, or measles or scarlet fever incorrectly called a drug rash.

These general considerations may help to indicate a line of approach to the study of skin diseases by showing the more important factors which require consideration. Naturally, difficult and obscure cases occur, but these can be more easily diagnosed when the common conditions are appreciated.

Whitbread

ANYONE who has been at Guy's even for a short time must have noticed the tall, imposing figure of Joseph Whitbread. Any stranger who has attempted to pass his threshold at the Front Gate has been stopped and asked his business.

Whitbread came to Guy's in 1908. At that time there were only three porters. In 1912 there were six, "Ship" being the second front gate porter. Since then there has been a gradual increase in number. This has been due partly to the expansion of the Hospital and partly to the already notorious student (? ward clerk) who acquired a hernia in the course of his duty.



WHITBREAD

Many changes have occurred since Whitbread first came. To quote his own words: "The Surgery was where the Surgical X-Ray is now, and all the cases were brought in through the Front Gate. The Massage Department was in that corner—there; it was just a cubby hole. Mr. Hughes must have been R.S.O., and Mr. Layton was in the Dissecting Room."

In 1914 Whitbread joined the Royal Artillery and fought at Gallipoli. An abdominal wound put him out of action for six weeks. Mr. Slesinger and Whitbread both speak of their meeting there. After the Great War Whitbread came back on the Front Gate, and he had been there until last October.

Last October, during the black-out, Whitbread was found lying outside the Front Gate in some considerable pain. Unfortunately, it was an hour before anyone heard his calls, and by that time he was wet through. In the Surgery it was found that he had sustained a fractured "tib. and fib."; this was skilfully reduced and immobilised by Mr. Atkins and Mr. Wass.

Whitbread is now back on the Front Gate, and almost any day he may be seen walking slowly towards his flat at the back of the Dental School.

The Case of Old Boggins

(With apologies to James Harpole)

I HAD only just returned to my practice after an absence of a few weeks, thanks to a severe attack of sulphanilamidosis, induced by the over-exuberant treatment of an early pneumonia by an earnest colleague.

I did not, therefore, feel too energetic, and so the sight of the burly figure of Spouter, who represents the makers of Omnivit (the perfect pabulum for peevish babies), as he came out of the waiting-room was not altogether displeasing.

After a few moments' conversation he told me of an old fellow who was in my waiting-room when he last called and who spoke to him at length of a complaint which he called " In-con-ty-nence." I at once recognised from his description the person of Old Boggins. I had seen Boggins a year or two previously, and from his curious monosyllabic utterance, his complaint, and his lively knee-jerks, I had diagnosed that mysterious malady of the central nervous system known as disseminated sclerosis, or which an Englishman perhaps prefers to call " insular sclerosis." My diagnosis, of course, was erroneous, quite erroneous, but pardonable, even in a man of my diagnostic acumen. Old Boggins's nervous system was organically quite sound. It was merely a trifle over-active. The actual trouble was situated in what is popularly known as the " prostrate " gland, so-called from its abject position in the bladder, that *ultima Thule* of the *corpus vile*.

When I told Spouter what the real trouble was his interest immediately quickened, and he began to tell me about their chief chemist, who, after years of research in his laboratory, had found nothing except a headache. A few weeks ago, however, in a moment of intense frustration and scorning all international tenets, pH values and icteric indices, he had suddenly seized a benzene ring and dealt it a violent blow with a hammer. The result was amazing—indeed, almost explosive. The new synthetic end-substance thus produced he had called " Orchidone." This substance has since been tried upon a series of puppies, with the most gratifying results. They had, in fact, been brighter and better puppies ever since. The technique of the treatment was to place tablets of Orchidone in the subcutaneous tissue, covering them over with neat fascial grafts from the ligamentum teres.

I decided at once to send for my assistant, Jim Jam, a man of colour, but possessed of a shining intellect (I may say, with all diffidence, that his intellect had a refulgence almost equal to my own). I explained the possibilities of Orchidone to him and its suitability in the case of Old Boggins. Jim Jam at once agreed, and said, " Yes, Sir." (He had been my house surgeon at the Hospital for Chronic Vegetarians and had retained his nice polite little ways ever since.) His skill with the scalpel was truly Oriental. In fact, my friends referred to him amongst themselves as the Bengal Lancer. Need I say more?

The operation on Old Boggins took place a few days later. In the ordinary way I should have given Evipan, but that being now somewhat *demode*, Hexyl-barbitone was administered instead, and before the syringe was empty Old Boggins was sleeping like a babe.

* * *

Some months elapsed before I saw Old Boggins again. I was taking my customary morning walk on the Piccadilly Underground somewhere about 5 a.m. when I saw Boggins advancing towards me from the other end of the platform, his face wreathed in smiles; in fact, it was a veritable imitation of the roseate hues of early dawn.

I knew then that my operation had been a complete success.

P.S.—Oh, I forgot! It was Jim Jam, of course, who did the operation.

G. L. D.

Orpington

(With Apologies to Rudyard Kipling)

AT Orpington, at Orpington—
What say the pro.'s at Orpington?
The lissom pro.'s that give and take.
(*Dare quam accipere.*)
They bend so far, but never break;
They keep the sleepy place awake
With fun and games at Orpington.

At Orpington, at Orpington—
Oh, hear the pro.'s at Orpington:
" You mustn't creep or climb or crawl
A garden fence, a boundary wall.
It wakes the stubborn Englishry—
We saw 'em roused at Orpington!

" When through our ranks old Hitler came ;
With little thought of praise or blame,
And resolute to play the game,
We hit the trail for Orpington ;
And there they launched in solid line
The first attack on Right Divine,
The frown on powder, curling pin,
That upset Guy's at Orpington.

" At Orpington, at Orpington,
Your rights were fought at Orpington.
No Guy's nurse shall be fined or bound
When talking to a soldier found,
Or dispossessed of stripe or string
Except by lawful judgment found
And passed upon her by her peer.
Forget not this eventful year
Of battles fought at Orpington.

" And still when County Council lays
Too rude a hand on Guy's own ways,
The whisper wakes, the shudder plays
Across the pro.'s at Orpington.
And pro.'s that know the ways of Guy's
Obey the rules because they're wise,
And rend the air with groans and cries
At changes wrought at Orpington."

BUFF ORPINGTON.

Sector News

Guy's Letter

SPRING has effectively altered Guy's landscape. Thanks to Miss Addiscott our Park has been transformed into a pleasing rockery with an attractive array of flowers. The sun's rays, filtered by the Borough mist, manage to find their way into our garden and revive the tired nurses and students who bathe in its splendour.

The number of out-patients continues to grow, as is evidenced by the longer sessions required to deal with them. However, now that the base hospitals are organised into co-operative units, a far larger proportion of patients are being evacuated to them directly. Last week a " double-decker " bus had hardly sufficient capacity to transport all the " walking patients."

The new innovation by which the ward reports accompany the patients to their respective base hospitals is to be introduced. This will save the busy house officers a lot of stenography, and it will enable those at the receiving end to realise that perhaps the cases were more than half-investigated.

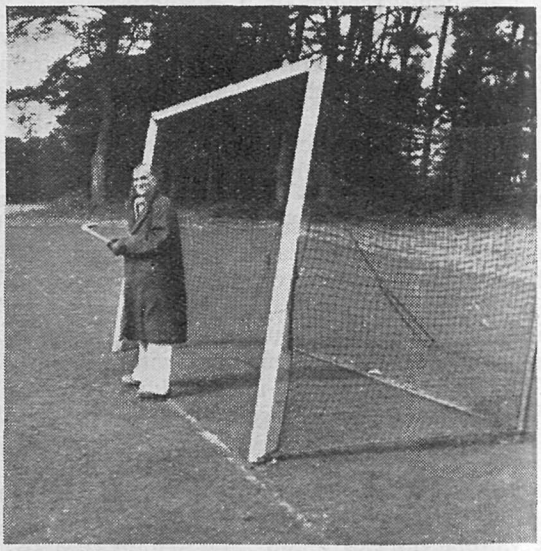
Clinical lectures and teaching ward-rounds are very well organised. Many of the senior staff attend both at Out-Patients and at Rounds, and with the steady wealth of available clinical material, teaching is being maintained at Guy's usual standard. Professor Ryle is returning to our midst with a series of lectures and rounds, and everyone is looking forward to his return with great anticipation.

There has been a growing feeling amongst outside doctors that Guy's is difficult and inconvenient to deal with. A new measure introduced last week should, to a large extent, solve this problem ; the doctor will now receive immediate and cordial attention and if it is humanly possible his case will be dealt with at Guy's in the most expedient manner.

B. L.

Pembury Letter

NOWADAYS we have no Official Weather, but perhaps we may remark that " the Garden of England " is beginning to live up to its name. Unfortunately, in our part of the garden a solitary weed has raised its head, and we will tell you more about it. It appears that all the morbid histology of Pembury is done at Maidstone, where, after an interval, a report and a slide are returned to us. This does not appear



" And who will stand on my right hand
And keep the bridge with me ? "

abnormal, but we must mention that Pembury has its own Morbid Histologist, and thus all our material is diverted from him. Most extraordinary is that the person concerned is none other than Prof. Nicholson himself. It seems a little

odd that such an eminent authority should not be responsible for our histology. One of the peculiar results of this arrangement we will now relate.

Mr. Turner, operating on a supposed female infant, removed what appeared to him to be a male sex gland. Naturally the sex determination of this infant depended on the " section," and eventually a report came back from Maidstone saying, " Spiradenoma." Quite apart from the fact that nobody knew what it meant, the sex question remained unsolved. Finally the slide was shown to Prof. Nicholson, who said one word only, " Testicle." Such then is the arrangement at Pembury. Indeed, " Truth is stranger than fiction."

The combatants fraternise

This week we bid a sad farewell to Bell, Rowlandson and Watts. We do not know who are coming in their places, but under the presiding genius of Dr. Macfayden, they are assured of a warm welcome. This Canny Scot is responsible for much of the harmony at Pembury, and, though he was trained north of the Tweed, nobody could tell he wasn't a Guy's man. Can there be any higher praise ?

N. M. J.

Orpington Letter

SHORTLY before 6.30 one beautiful Sunday evening a man was walking hastily to and fro among a host of officials and people gathered in Orpington Station, giving his last-minute instructions. He was not above medium height, but of goodly proportions, his hands were full of impressive diagrams and complicated lists, and his puckered brow betrayed the heavy responsibility he was bearing. All around him were men and women in the uniforms of the Red Cross and St. John's Ambulance waiting beside their stretchers ; outside the whole strength of the local A.R.P. personnel and transport were collected in impressive numbers, while beyond the population of Orpington were gathering in ever-increasing numbers. Suddenly the station bell began to sound, a herald of the train which appeared a few minutes later—a train whose green coaches had red crosses on their sides. And, as it drew into the platform and came to a standstill, the first B.E.F. convoy for Sector 10 had arrived at the last stage of its journey to Orpington War Hospital.

The first warning of its arrival had been received ten days earlier. We had been informed that a convoy could be expected within three days, and the resulting activity added to the prospect of doubling the number of hospital patients in so short a time was as exhilarating as it was unusual. Within two days preparation for their reception was almost complete, but no further news came through, and, as the hours and days rolled by, a feeling arose that, even if we hadn't actually been hoaxed, somebody had taken rather unnecessarily drastic measures to test our preparedness. However, a week later definite news came through at last, and hence the activity that Sunday evening.

The removal of the soldiers from station to hospital occurred with amazing speed and efficiency, thanks to the foresight of Dr. Scott, who had spent so much time in perfecting the details

of their transport, while their distribution through the wards proceeded with an ease which we have come to expect of Dr. Campbell. So it was not long before they had all been tucked up in bed, and when lights went out that night there were nearly two hundred more beds occupied than on the previous night.

The ten days we had been allowed to prepare had been used well, and all that was possible had been done. We are sorry that this enthusiasm could not have been communicated to the authorities outside. In the new block the X-Ray Department remains an empty shell, while the theatre is so nearly complete that the small omissions of plumbing that remain leave even less excuse for it not being ready. Communication between this block and the rest of the hospital still necessitates walking that distance, though, as the erection of telephone posts has already begun, it should not be many days, weeks or months (we have learnt not to differentiate too precisely between these measures of time when prophesying progress here) before the wards can be warned of the approach of night sister. We have mentioned

before the almost complete absence of chairs in the wards; now to add insult to injury we learn that a large supply of these are lying idle in another E.M.S. hospital which has no immediate prospect of occupation on account of the almost total lack of any other equipment.

Generous passes have enabled those who are well enough to explore outside the grounds, and hospital "blues" are becoming a familiar sight in the neighbourhood. This has done much to prevent the lack of a recreation room being felt, though in a short time this should be remedied by the equipping of a ward as such. Already we have received many presents of cards and games

for the troops, for which we are most grateful, and we would be very glad of further gifts.

G. L. L. R.

Joyce Green Letter

WE continue to receive convoys of patients from the Metropolis. While some of the patients have had their preliminary treatment at other hospitals, a progressively larger percentage of them are coming directly to us.

We have been receiving an increasing number of cases for operation, but the variety is not very great, tonsillectomy being the commonest operation we are called on to perform.

Two resident surgeons and a visiting surgeon are attached here, and we are now able to cope with a large number of cases.

We are unable to write our letter these days without mentioning the rubella virus. This time it is Dr. Elliott who has qualified for a week's leave. This brings the victims of the medical staff up to four, besides numerous other cases in the hospital.

Finally we wish to extend our heartiest congratulations to Willcox on his marriage to Nurse Yates.

L. G. S.

Correspondence

Clinical Research

To the Editor of the GAZETTE

SIR,—The recent letters on research (with or without capitals) promise to develop into a controversy at cross purposes. All the writers are agreed on the necessity of research for the spiritual and material welfare of medicine. Professor Wright advocates " a happy combination of ward and laboratory work," while Mr. Brock seems to deprecate the usefulness of the combination and favours the clinical approach of Addison and Bright, but he could not have chosen better examples of the limitations of the method he advocates. Until the resources of the laboratory were called on, little was added to our knowledge of these two diseases during a hundred or more years. The pathogenesis of Addison's disease was elucidated by animal experiment (Swingle and Pfiffner, 1931), while that of Bright's disease has still to be clarified, though recent work (Goldblatt, 1937) shows that here, too, much may be anticipated from the experimental method.

To-day, scientific discovery in medicine is seldom the result of a single man's work or of a single method ; it is more frequently the accumulation of a team of co-operative workers. The clinical and experimental methods are not mutually exclusive, but complementary. In a medical school, those undertaking research are blessed with opportunities of utilising all the available methods.

While nobody will deny that man is the most suitable experimental animal, how often does the opportunity occur without violating the Hippocratic oath ? One is frequently forced to apply the experimental method to " animals and test tubes " not because they are better but because man is not convenient.

Mr. Brock favours the " study of a hundred cases or more," but this can surely be made part of one's routine work when an answer to the question can be given after years of collecting and recording. Mr. Brock gives instances of brilliant therapeutic measures conceived by surgical research, but so, too, was gastro-jejunostomy hailed in its day.

A further question is raised. Should research be conceived and executed by a team of workers co-ordinating their activities or should it be limited to the sporadic efforts of an individual ? The former undertaking is costly, since it requires a full-time staff of clinical and laboratory workers, which few medical schools without endowments can afford. The latter can and is carried out by people engaged in practice who make their time according to their enthusiasm and opportunities. There is, however, a marked difference in the quality and quantity of the output of knowledge. Who will deny that the State-aided Medical Research Council, by employing full-time workers, have achieved much more with a limited staff than the hundreds of workers in numerous medical schools ? And yet the medical schools are in a more advantageous position since they have opportunities of studying disease in its natural state.

I submit that the more costly method of research departments endowed by the State and employing full-time workers has been proved by actual experience to produce results of greater scientific quality and in greater abundance than the sporadic efforts of individuals. The latter can still carry on and would not be excluded by the institution of research units in the teaching hospitals and medical schools.

Yours, etc.,

S. DE NAVASQUEZ.

Dept. of Pathology,
County Hospital,
Farnborough, Kent.

Clinical Teaching and Research

To the Editor of the GAZETTE

SIR,—The nature and scope of clinical teaching depends to some extent on whether it concerns the under- or post-graduate. There is no reason why both teaching and research should not be undertaken by the same individuals, but it by no means follows that the best teachers make the best research workers, or *vice versa*. The most brilliant teacher I ever met was a man who, with little or no inclination for research, was nevertheless a remarkable organiser in a laboratory in which a very large amount of routine work was carried on. I would even venture to say that, as a rule, the temperament and ability of the most successful research worker are not the most suitable for systematic teaching.

Undergraduate teaching aims at preparing men for specific examinations in which a sound, but not necessarily extensive, knowledge of the subjects is required. It should therefore be simplified as far as possible, yet clear-cut, comprehensive, and rather dogmatic. Its object is to inculcate principles and what may be called the " elements " of the subject, in order to erect a sound framework on firm foundations, which will enable the undergraduate to take the polish imparted by time, experience and continued study.

Post-graduate teaching is roughly of two kinds. There are the " refresher courses " for general practitioners—these are brief and largely of a revisionary character. There are also the courses intended to lead to one or other of the special diplomas or higher examinations, as, for example, those preparing men for the M.R.C.P. or F.R.C.S. They are expressly intended to deepen the graduate's knowledge and extend his clinical horizon. As such, they must be comprehensive, but less dogmatic than the more elementary teaching suitable for the *ab ovo* undergraduate.

Most medical students will eventually become general practitioners, but whether they enter general practice or take up a specialty, nothing will yield more valuable, profitable and lasting results than carefully planned teaching at the bedside and in the Out-Patient Room. The more cases a student sees and handles during his impressionable and receptive years—assuming that he is really interested in his work—the more capable doctor he will make.

It is impossible to mention clinical research without thinking of Sir James Mackenzie, who for the greater part of his life was a general practitioner in the Lancashire industrial town of Burnley. Some of us recall his brilliant contributions to the journals and remember that at the time more than one denizen of the Cavendish Square area regarded them as gross insubordination.

The British Medical Association awards annually the " Sir Charles Hasting's Prize " for research work carried out in general practice. One has only to appreciate the high standard of entries to realise that there is much more quiet and valuable research work being carried on by the general practitioners of the country than is generally known.

Starting from the bedside, clinical research leads to the exploration of many avenues—clinical, biochemical, pathological, pharmacological, therapeutic and bibliological. Sometimes valuable contributions may be achieved by individual effort; at other times it calls for the co-ordinated work of a team. One of the greatest handicaps to clinical research is a by-product of specialisation, *i.e.*, a tendency to work in watertight compartments with deficient liaison, co-operation and correlation of results.

Should clinical research be subsidised? Certainly it should. It is always costly, and usually beyond the means of those who engage in it. When hostilities were carried on in so many theatres in the Great War, each with its own special medical problems, research on intensive lines became urgent, in order to combat epidemic and endemic diseases which threatened to jeopardise the effective strength of the forces. Unlimited resources were placed at the disposal of whole-time research workers, who elucidated in quick time many hitherto unsolved problems in connection with malaria, blackwater fever, dysentery, sunstroke, pellagra and schistosomiasis—to mention only a few.

In both clinical teaching and research, everything depends upon the personal inclinations and attributes of individuals and a happy selection of workers. There is not a medical school in this country where the clinical teaching is not capable of improvement. Not all teachers possess the aptitude. Some only engage in it as a stepping stone to " something better." Others are handicapped by the exigencies of busy private practices.

There is ample room for better organisation and improvement—and for the sinews of war.

Yours, etc.,

CARFAX.

Research and Inoculation

To the Editor of the GAZETTE

SIR,—It is again pleasant to see *Guy's Hospital Gazette*. There are the same good spirits there as of old, keeping up the pride and forms of Wide Berth and the good features of clinical and discussional potentialities. You honour your chiefs, yet you honour your predecessors—*Plus ca change plus c'est la meme chose, n'est-ce pas*?

Just after my period at Guy's, soon after the Behring, Kitasato and Roux researches, I ventured to record, in 1895, in the *British Medical Journal*, one of the first successful private cases in London of anti-toxin inoculation for apparently hopeless diphtheria.

Previously, in 1893, I had been the first pioneer to be inoculated, at Cambridge University, by Prof. Westbroke (McGill University) for cholera with Haffkine's serum and cholera germs. I recorded my experiences briefly in the *British Medical Journal*. About then, when the Chicago Exhibition was on, I visited America. I could see that they were not so advanced in the medical sciences, for during that giant Victorian age we had developed and certainly gone ahead in the Old World.

Now all things, constitutions too, are rapidly changing, during these artificial days of top-speed hurrying, sometimes havocings everywhere. Still, as Time wastes away, Medicine reaches ever on to new fields of enquiries, and let us hope to new original researches rather than the usual "researches," when, no doubt, *Guy's Hospital Gazette* will never lag but show how the progress goes on for the common weal.

Yours, etc.,

H. ELLIOT-BLAKE.

Estser House,
Beer,
Devon.

"Military Medical Service"

To the Editor of the GAZETTE

SIR,—Your correspondent Maureen Kelsey flatters me when she suggests that I have given her a clue to "one cause of the shortage" of doctors in the Services. Her inference that "the pay and rank of Major, synonymous with that of Army Specialist, is the smallest bait at which a large number of doctors would nibble," is not only offensive but also loses sight of the fact that there are about 30,000 medical practitioners who can make no claim to specialist rank. She surely cannot wonder that specialists would like to practise their speciality, even in the Services, which make provision for such practice. Moreover, does she consider the unfortunate Service men who would be the victims of a specialist "performing duties outside his normal sphere of activities"? If not, I would suggest she conjures up the picture of being anæsthetised by a radiologist, and having a laparotomy performed by a pædiatrician! Is this much worse than asking a surgeon to diagnose early phthisis?

Your correspondent's remarks about the appointment of an eminent Guy's gynæcologist to a military hospital suggest that she is completely unacquainted with the facts, and therefore requires no answer. I must repeat that what "interested" me in my original "Pembury Letter" still interests me. Interests, mark you, not appals or horrifies.

Finally, why should conscription be a cause of shame to Maureen Kelsey? The British Army is built up by it, and the French consider it an integral part of their citizenship. Amongst the many advantages of conscription not least, by any means, is that it deals effectively with the type of person who gives white feathers and wears Union Jacks embroidered on their under-garments.

Yours, etc.,

N. M. JACOBY.

Windflowers,
Pembury,
Kent.

The Hæmatological Laboratory

To the Editor of the GAZETTE

SIR,—Re-opening of the Clinical Laboratory brings to an end our war-time privilege of providing the students with a hæmatological laboratory of their own.

It has been a great pleasure to have had them working in this Department, and may I remind them through your columns that they are very welcome to continue to use the same laboratory for bacteriological work. It is now being equipped for that purpose and also with permanent demonstration sets suitable for revision purposes.

Yours, etc.,

F. A. KNOTT.

The Department of Bacteriology,
Guy's Hospital,
S.E.1.

"Selection of Rugby Players"

To the Editor of the GAZETTE

SIR,—The game played *versus* the Rosslyn Park Public Schools on Wednesday, April 3rd, was arranged by the writer of this letter and the secretary of the opposing team.

The Public Schools' secretary agreed at the time

that, as the Hospital would not be able to field a representative fifteen owing to evacuation and examinations, players from other hospitals should be invited to play in order to give the opponents a good game.

This was done, and an excellent game was played, resulting in a win for " A Guy's Hospital XV " by a try and a penalty goal to a try.

It is felt that games such as these will do much to encourage young players to come to the Hospital.

Unfortunately, owing to a misunderstanding the game was advertised as a 1st XV fixture, and this has probably given rise to " Subscriber's " misunderstanding. It is hoped that this letter will allay his anxiety.

Yours, etc.,
J. C. BULSTRODE,
Asst. Hon. Secretary,
Guy's R.F.C.

The College,
Guy's Hospital,
S.E.1.

Our Park

To the Editor of the GAZETTE

SIR,—I have just returned from the sector areas, where the countryside is green and shows all the signs of Spring.

Now, Sir, I write surrounded by the dirty Borough buildings with my nostrils filled with soot-laden air. The lack of country air depresses me and there is no green Park to comfort me. The endeavours of Miss Addiscott to cover up the trenches are ruined by the laziness of people who walk across the grass in an endeavour to save a few short seconds. As a result the grass is covered with muddy tracts. May we have the chains replaced and try to preserve the grass? With some luck we may again have a " green and pleasant land."

Yours, etc.,
EX RURE SALUS.

Guy's Hospital,
S.E.1.

Sport

Rugby

Guy's v. The Wasps

(At Honor Oak Park on Saturday, April 6th)

EARLIER in the season the Wasps lost their unbeaten record to Guy's, but in this game the visitors revenged their defeat and won by a dropped goal, a penalty goal and 2 tries (13 points) to 3 tries (9 points).

It was an ideal day and the return fixture proved a great attraction. Both sides were strongly represented, but it was disappointing to find that Gilthorpe, the English International, and Osmond were unable to play, as the duel between these two hookers would have been most interesting.

Guy's did most of the attacking and should have won comfortably, but credit must be given to the visiting backs, who tackled magnificently and did well to keep the Hospital from registering further tries.

It was a grand game, fought out at a cracking pace and, although the referee's whistle sounded a little too often, play was always interesting to watch.

With the wind in their favour Guy's pressed, and the combined efforts of Babrow and Harrett enabled the back division to carry out several bouts of passing, but the Wasps had some good defenders in Bowcott, the Welsh International, R. W. Dunn, of the London Scottish, and L. Hutcheson, who were always in the right place.

Against the run of play the Wasps took the lead following a splendid effort by Hutcheson, who made a thirty-yards' run, cross-kicked to Dunn, who took the ball in his stride and scored in an easy position, but Cornes sliced his kick.

A little later the visiting pack forced their way to the Hospital goal-line and, following several scrums near the line, Edney managed to cross for a try, which was not converted.

Guy's rallied strongly and Babrow, who was playing well, cut through beautifully; Kynaston was up to take the pass, but Crawford was tackled just as he was about to cross the line.

However, another break-through by Babrow enabled Lillywhite to send Gartrell away on the right and, showing a fine turn of speed, he passed Tarbart and Dunn, and just beat Cornes in the race for the line.

Before half-time Guy's drew level following some good play by Kynaston and Crawford. The ball travelled from one wing to the other, and again Gartrell's speed carried him over the line for a try, but, although the kick was fairly easy, Mullins missed a great chance to add the goal points.

After the interval the exchanges were fairly even and both sides played good open football. The passing was excellent, but, although Guy's came near the line on several occasions, they just failed at the critical moment. They were awarded at least three penalties, but Mullins, usually the

most reliable of place-kickers, was baffled by the cross-wind and failed to land one over the bar.

Feet-up cost Guy's a penalty in front of the posts, and Compton kicked a good goal from long range.

The Hospital tried hard for an equaliser, but their fate appeared to be sealed when Bowcott, from near the half-way line, dropped a fine goal. This reverse did not deter Guy's, who put on extra pressure, and after Harrett had broken away from a scrum, the forwards backed up and, following a bout of short passing, Sharpe crossed for another unconverted try.

Towards the end Guy's pressed heavily, but eventually the whistle sounded no-side with the Wasps still clinging to their lead of four points.

Both full-backs Cornes, who formerly played for Bedford, and Lewis deserve praise for their kicking, which was strong and accurate. Williams, Albers and Sharpe were hard-working forwards and were prominent in the loose.

Teams.—T. L. T. Lewis; P. C. Gartrell, W. H. Lillywhite, R. U. F. Kynaston, J. P. Crawford; L. Babrow (captain), P. D. V. Harrett; D. P. Finnegan, R. M. Sharpe, J. P. Rochford, J. R. D. Williams, J. C. Bulstrode, T. W. Renton, G. A. Albers, M. R. Mullins.

Cricket

FIRST XI FIXTURES, 1940

WEEKDAY FIXTURES

		May		
Sat.	4	Private Banks	Catford Bdge.	2.30
Wed.	8	Wanderers C.C.	H.O.P.	11.30
Sat.	18	St. Bart.'s Hos.	Chislehurst	2.30
Wed.	22	Charing Cross Hos.	H.O.P.	2.30
Sat.	25	Empire XI	H.O.P.	11.30
Sun.	26	(2-day match)		
		June		
Sat.	1	Richmond Town C.C.	Richmond	2.30
,,	8	Bromley C.C.	Bromley	2.30
,,	15	St. Thomas's Hos.	H.O.P.	2.30
,,	22	—	—	—
Wed.	26	Richmond Town (Wed. XI)	H.O.P.	2.30
Sat.	29	Crofton Park C.C.	H.O.P.	2.30
		July		
Wed.	3	Stoics C.C.	H.O.P.	11.30
Sat.	6	Beckenham C.C.	Beckenham	2.30
,,	13	Middlesex Hos.	Chislehurst	2.30

SUNDAY FIXTURES

May	19	The Rabbits	H.O.P.	11.30
,,	26	Empire XI (2nd day—*cont.*)	H.O.P.	11.30
June	2	The Buccaneers	H.O.P.	11.30
,,	9	Catford C.C.	H.O.P.	11.30
,,	16	—	—	—
,,	23	—	—	—
July	14	Old Wimbledonians	H.O.P.	11.30
,,	21	Addiscombe C.C.	Addiscombe	11.30

Hospital Information, etc.

Nursing News from all Fronts

Miss H. M. Gration, Orpington War Hospital, Kent.

Miss W. Johnson, Gwern Alyn, Wrexham, N. Wales.

Miss B. Lavers, 5th General Hospital, B.E.F.

Miss P. Marris, Guy's Hospital, S.E.

Miss Woodhams, 27, High Street, Battle, Sussex.

Notices

THIS MEDICINE

Owing to the scarcity of suitable contributions, it has been decided to discontinue this series. Plans for a new competition will be announced shortly.

ANNOUNCEMENTS

Clinical Lectures.—The first of the new series of clinical lectures will be delivered by Mr. T. B. Layton, D.S.O., M.S., on Monday, May 6th, at 1.0 p.m. The title of his lecture is, "Inflammation of the Middle Ear Cleft."

Commencing on Wednesday, May 8th, Professor J. A. Ryle will give a series of lectures and ward rounds. The subject of the first lecture will be "The Approach to Medicine."

On and after Tuesday, May 7th, patients will be seen in the Genito-Urinary department in the afternoon instead of in the morning on Tuesdays and Fridays. They should attend at 12.30 p.m.

Pass List

UNIVERSITY OF CAMBRIDGE.

Diploma in Medical Radiology and Electrology.

PART II.

April, 1940.

T. H. Hills — A. B. Wayte
A. C. R. Wakeman

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

M.R.C.P.

April, 1940.

E. B. French. — A. T. M. Roberts

SOCIETY OF APOTHECARIES OF LONDON.

FINAL EXAMINATION.

March, 1940.

Surgery.

*C. Bucknall.

Midwifery.

C. A. Anderson.

* Has completed the examination.

SOCIETY OF APOTHECARIES OF LONDON.

PRIMARY EXAMINATION.

April, 1940.

Anatomy.

R. A. Bush — R. A. Leeming

Physiology.

R. A. Bush — R. A. Leeming

FINAL EXAMINATION.

April, 1940.

Surgery.

*T. A. H. Adkins — G. T. Hammond
*P. Haden — *H. A. Kreiser

Medicine.

*G. E. H. Enderby — *J. P. Rochford
*H. A. Kreiser

Forensic Medicine.

*G. E. H. Enderby — *J. P. Rochford
*H. A. Kreiser

Midwifery.

S. Wetherell.

* Have completed the examination.

Papers by Guy's Men

West, E. M. B. Ruptured ectopic gestation. *Brit. Med. J.*, 1940, i, 656.

Douthwaite, Arthur H. Chronic rheumatic disorders. *Medical Annual*, 1940. (Gout, p. 208; Rheumatoid arthritis, p. 399.)

Campbell, A. M. G. Carcinomatosis of bone; difficulties in diagnosis. *Lancet*, 1940, i, 777.

Pearson, R. S. Bruce. Sclerodermia with involvement of muscles. *Proc. Roy. Soc. Med.*, 1940, xxxii, 330.

Changes of Address

W. B. Clegg, Lt. R.A.M.C., 7th Batt., North Staffs., Northwick, Cheshire.

R. W. Cunningham, Capt., R.A.M.C.. Anti Aircraft Regt., R.A., Egypt.

D. E. Denny-Brown, Major, R.A.M.C., Military Hospital, Oxford.

C. E. Gallagher, Major, R.A.M.C., Command Headquarters, Aldershot.

Grant-Massie, Lt.Col., R.A.M.C., Catterick Camp, Yorks.

R. A. E. Hammond, Major, R.A.M.C., 3rd General Hospital, B.E.F.

T. A. B. Harris, Major R.A.M.C., Tidworth, Hants.

A. G. W. Hill, Surg.-Lt., R.N.V.R., H.M.S. Teviot Bank, c/o G.P.O.

F. B. Lake, Lt., R.A.M.C., 10, York Crescent, Aldershot.

J. N. Martin, Major, R.A.M.C., Bowthorpe Hall, Wisbech.

G. W. D. Reeves, Capt., R.A.M.C., Egypt.

S. Mc.K. Saunders, Lt.-Col., R.A.M.C., No. 1 Convalescent Depot, B.E.F.

R. O. Yerbury, Capt., I.M.S., New Delhi, India.

E. K. Breakspear, L.D.S., 44, The Ridgeway, Westcliff-on-Sea.

A. R. Thompson, Ch.M., 58, Scarsdale Villas, Earls Court Road, W.8. Tel. Weston 6199.

W. G. Zorab, The County Hospital, Whiston, Nr. Prescot, Lancs.

Marriages

GODBER-PETTIT.—On March 30th, 1940, at Christ Church, Lancaster Gate, Greville Godber, son of Mr. and Mrs. Noël Godber, to Gwendoline, Ursula, eldest daughter of Mrs. Harrison-Petit.

BIRKS-MORGAN.—On March 20th, 1940, at Woodbridge, P. H. Birks, R.A.M.C., elder son of Dr. and Mrs. A. H. Birks of Woodbridge, to Mary Maud Morgan, only daughter of Mr. and Mrs. T. D. Morgan, Fermoy, County Cork, Eire.

Births

LASHMORE.—On March 11th 1940, to Grace (nee Parker), wife of Dr. G. F. Lashmore, at 662 Dunstable Road, Luton.—a son.

PITT-PAYNE.—On April 21st. 1940, to Gladys Barbara (Nee Guise), wife of Dr. F. E. Pitt-Payne, at 180 Widmore Road, Bromley, Kent.—a son.

Deaths

HARDING.—On April 1st, 1940, Agnes H. Harding, Health Visitor in Bristol since 1924.

HINTON.—On April 25th 1940, at 23, Caledonia Place, Clifton, Bristol, Hammond Tooke Hinton, M.B., C.M., formeriy of Heytesbury, aged 73 years.

EDS. { N.A.N. / B.S.L.

GUY'S HOSPITAL GAZETTE

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PASSIM

THE most difficult part in the administration of any organisation or cause is the control of the human factor. In mechanics one designs a machine to do a specific kind of work, and all the parts are cast so that they act in perfect co-ordination; thus a high degree of efficiency is obtained. It is on this pattern that governing bodies of people are modelled. Those who have demonstrated particular aptitude are chosen for leadership, and, while the leader sits in the driver's seat, it is essential that all his subordinates carry out their duty to the best of their ability without clogging the mechanism by grasping personal ambition.

From the point of view of the expedient execution of a definite task it is very unfortunate that the human mind was endowed with the faculty of self-rationalisation. Given sufficient time and lax discipline, we begin to look into our personal circumstances, to dream of the futures and careers we had planned, and to look across the fence at a colleague whose progress has been rather more rapid than usual. This sediment of dissatisfaction spreads like bad oil through the bearings and moving parts of a motor, resulting in excessive friction, very poor performance, and finally in irreversible damage to the entire mechanism.

It was these undercurrent grumblings of dissatisfaction by a semi-informed population that gave rise to the recent crisis in our national government. Success in modern warfare still revolves about the element of surprise, and if strategy is to be completely effective, it is seldom possible to devulge all the details concerning our progress, reverses and future plans. There are individuals in our society who, although in sympathy with the ultimate aims of this war, would profit by a change in present policy. Thus, armed with a garbled version of the news, they attempt to twist public opinion and so overthrow the leadership of the Government. In other countries this would result in severe persecution, but in the British Empire these complaints are accepted with an intelligent understanding and by numerous buffering processes everyone is satisfied by a simple reshuffle of the governing personnel. Unfortunately, other countries interpret these changes as weakness and defeat, and unless we can put forward a strong united front enjoying the confidence of all the people our prestige abroad is sure to suffer.

While Holland and Belgium were neutral it was impossible for us to establish any military bases within their boundaries and so be in striking distance of the enemy's back, and relatively unprotected, door. At the same time, if Germany could swiftly attack and assume possession of these countries then her military position would be immensely improved. Last week, taking advantage of our political unrest, she felt that the time had come. Marshalling up all her available energy and resources, she has swooped down upon these innocent peoples, using every artifice and trick to throw them into confusion and destruction. Wave after wave of aerial bombing and machine-gunning have been sent over; even the long streams of refugees like withered threads upon a broken landscape have been literally massacred. However, for the first time in his history Hitler has walked into a den of prepared opposition!

It is a very grave mistake to under-estimate the strength of the enemy. We have entered this war with extreme buoyancy which is kept bolstered up by the news that is fed to us and the magnified reports of our successes. Very few civilians and even soldiers realise the grimness of the struggle that has been started. Petty personal differences

still crop up and become important issues, impeding the progress of the national cause.

War machinery has been greatly improved in the last two decades. Instead of the battle charger travelling at 20 miles an hour, we have aeroplanes with a speed of over 300 miles an hour, capable of long-distance cruising and loaded with heavy incendiary bombs. At the same time, for every instrument of destruction that has been devised adequate defence mechanisms have been invented. The result of this increase in military scope is that no portion of society is ever really safe from attack. Given a moment's advantage, it will be possible for the enemy to wipe out whole communities. It is only by maintaining our elaborate defence organisation both at home and abroad that we can discourage any attack on our position. Armed with this knowledge and confidence, it will thus be possible for our leaders to thrust out surely and quickly when such opportunity presents itself.

It is therefore our duty at home to believe that the enemy are being drawn into an ever wider and deeper trap, so that ultimately she will become an unmanageable mass of dismembered segments. Whether we are wearing a uniform or not, each of us must behave like little spheres in the ball of society, assuming tasks which may be far beneath our station in life and at the same time watching others twist themselves into responsible positions. Nevertheless, without a look to either side, we must pull forward, with all our weight, towards a quick and decisive victory.

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We should like to draw the attention of our readers to the letter published in this issue, sent us by the editorial committee of the *Guy's Hospital Reports*. We welcome their determination to maintain publication of the reports and venture to hope that as many as possible will respond and help to make the Sir Arthur Hurst number a great success. For this reason, we publish a loose order form by use of which a substantial reduction in the price of this number may be obtained. This form will be distributed shortly.

Obituary

J. S. CRONE

All who were privileged to know J. S. Crone will have been shocked to hear of his death at sea. It is as a sailor that one thinks of him first. On the sea he was magnificent, whether racing a small boat or crewing a big one. His physical strength and splendid fitness, his knowledge of seamanship and navigation, added to his cheerfulness in hardship and courage in danger, made him the first choice of any knowledgeable skipper. He raced in Mitchell's six-metre, and got the name "Jerry," by which he was always known, because there were already two other Johns on the boat, and he was a member of the crack crew that raced *Maid of Malham* to first place under Commander Illingworth. He also cruised extensively in the Baltic in *Droleen* with Gill, who has now lost one of his best friends as well as his brother in the sea war. Off duty he was excellent company, and one of the best of raconteurs. He specialised in a form of pseudo-scientific pompous narrative, which he would recite in a deep booming voice with an expression of intense seriousness. He had also the most astonishing facility in repartee and counter-thrust, using words or phrases so exact that they could not have been bettered by hours of patient polish.

But Jerry was more than a charming playboy. He worked as well as he played, and was as charming to his patients as his friends. He had first-class brains and hands, and the vitality characteristic of him went into the performance of all his jobs. A glance at his medical record shows one of the most consistently good "sign-ups" ever recorded in those unemotional files. Idleness alone he could not tolerate, and when he was sent at the outbreak of war to a job that existed on paper only, and found the ranks of naval medical service apparently closed to him, he was miserable. When he was finally granted a commission he asked to be put in submarines, and in that service he met his death.

Minor Injuries to the Fingers

By D. M. Carter, Esq.

It can be truly said that nearly all injuries to the fingers and toes are minor in that danger to life and limb is comparatively slight. It is, however, also true to say that, in view of the fact that many injuries of the digits can give rise to great and prolonged functional

disability, they should be classed as serious, even if at first sight they should appear of little importance.

The following types of injuries will be considered :—

(*a*) Simple crushes, cuts and lacerations.

(*b*) Fractures of the phalanges and the metacarpal heads.

(*c*) Interphalangeal sprains and subluxations.

(*a*) Crushes of the fingers, especially of the tips often give rise to a painful bulbous extremity which may take a long time to heal. Hæmorrhage should be controlled by firm compression over the points of bleeding. After the wound has been cleansed the contour of the digit should be reformed and a plaster accurately applied to the whole finger. It may be necessary to pass one or two turns around the wrist to stop the plaster from coming off. By this means the patient is enabled to use the remainder of the extremity, which will not be rendered useless and functionless by prolonged immobility. The plaster forms a limiting membrane to the entire digit ; this greatly facilitates epithelisation and healing.

If the nail be nearly avulsed from its bed or if a hæmatoma has formed beneath, it is most expedient to remove it at once.

It is not uncommon to find that quite large areas of skin have been completely flayed from one or more digits. For these cases an immediate pinch graft from the deltoid region placed over the raw area and the whole incorporated in a plaster finger stall gives excellent results. When the plaster is removed there may be perfect healing with a digit of normal contour which rapidly resumes its function. Very often, however, these cases " are dressed " for many weeks, become infected and permanently stiff. They are the cause of prolonged disability, and not uncommonly come to amputation.

Crushes of the terminal phalanges with or without bony injuries are often associated with the condition of mallet finger, which is a rupture of the strip of the extensor tendon going to the base of the terminal phalanx. A plaster is applied in the same way, but should be moulded so that there is hyperextension of the terminal phalangeal joint, the other phalangeal joints and the metacarpo-phalangeal joint being slightly flexed. In this way the two ends of the divided tendon are approximated and join. This is a far better method of treating mallet finger than the rather uncomfortable and cumbersome procedure of strapping the finger into the palm. Even an old-standing case may be treated in this way.

The following is an interesting condition that may follow a blow on the end of the finger. Although no fracture, dislocation or laceration has occurred, the patient is left with a painful, swollen, stiff and slightly deformed finger, which may be present for months. X-ray shows nothing, and the condition is probably due to severe bruising of the bone with the formation of a sub-periosteal hæmatoma. If left alone and not pummelled and massaged the condition always gradually rights itself. The correct treatment, therefore, is to do nothing but reassure the patient that all will be well in a few months.

(*b*) *Fractures.*—Only three of the commonest types of fracture of the digits will be mentioned. These are :—

1. Crushed and comminuted fractures of the terminal phalanx.
2. Fractures of the shaft of the proximal phalanx.
3. Fractures of the metacarpal heads.

They may be simple or compound.

1. Compound finger injuries should be treated by immediate operation. A quotation from Watson-Jones may help to demonstrate their importance : " An open fracture of a phalanx is no less worthy of the skill of an expert than an open fracture of the femur, and there is often little difference in the economic value of successful treatment."

As in all compound fractures, the wound should be excised and, if possible, sutured ; cat-gut where possible should be avoided for the same reasons that it should not be used in the control of hæmorrhage. If the wound is large, skin grafts may be employed, but small areas can be left open. The whole digit is then placed in a plaster in the same manner as for simple lacerations. Any deformity in the bone should, of course, be reduced and maintained in the corrected position by a plaster cast.

A severely crushed and contaminated finger may require amputation. In the case of the thumb this advice shall on no account be followed, as the problem is a different one. Any part of the thumb should be conserved if possible, for, even if stiff, it does not get in the way as in the case of the fingers, and, even if its terminal joint be rigid, it can still oppose and grip with the other mobile fingers. If an amputation has to be done it should be as conservative as possible. If it is not possible to fashion flaps, the end can be left raw and the stump skin-grafted and fixed in plaster.

2. Fractures of the proximal phalanges.—Fractures of the proximal phalanges account for half of the bony injuries to the fingers. There is usually a characteristic displacement with a forward angulation about the middle of the shaft of the

bone. This deformity is produced by the action of the interossei and lumbricals, which flex the proximal and extend the distal fragments, thus producing a forward convexity.

This deformity should be overcome by traction and by flexing the distal fragment into line with the proximal one. The corrected position should be maintained by a forearm plaster cast with an extension incorporating the affected digit so that the metacarpo-phalangeal joint is flexed to 45° and the proximal interphalangeal joint to 90°.

If the fracture is unstable it may be necessary to use pulp traction, the line of traction running from the pulp (with the finger in the position already described) to the second fixed point, which is to the plaster just in front of the wrist, traction being maintained by an elastic band.

After three weeks the plaster should be removed. All the other fingers should be actively exercised throughout the period of immobilisation.

3. Fractures of the metacarpal heads. These are generally produced by blows on the end of the knuckle. Again the deformity is characteristic, the head of the metacarpal being tilted forwards, thus producing a backward angulation at the end of the bone. Reduction is usually not difficult.

The metacarpo-phalangeal joint should be flexed and the head of the metacarpal bone pushed back into position by a thrust in the long axis of the proximal phalanx. The corrected position should be maintained by a dorsal forearm slab extending to the metacarpal heads, with a dorsal extension of the plaster over the affected digit. This is maintained in right-angled flexion at the metacarpo-phalangeal joint, the interphalangeal joints being likewise flexed. The plaster may be removed after three weeks and active exercises commenced.

(*c*) *Interphalangeal sprains and dislocations.*—Of equally serious importance in injuries of the fingers are interphalangeal sprains and dislocations. A persistently painful joint often results from these injuries. The joint capsule is often torn, there is œdema, hæmorrhage, swelling and the formation of much periarticular adhesions. It is essential to reduce this œdema and adhesion-formation in order that a normal range of movement can be obtained. The joint should be rested in a plaster finger stall in a position of slight flexion. By this means swelling is reduced to a minimum and adhesions are avoided. This plaster should be maintained from two to three weeks. On no account should the joint be pummelled about, stretched, or attempts made to overcome stiffness by force, for the swelling and adhesions are only aggravated. The worst possible complication of an interphalangeal sprain is massage and passive exercises. After three weeks' rest the patient should be able to overcome stiffness by his own effort. If the traumatic exudate has been allowed to subside, he will recover his full range of movement, even though this may take a long time. However, if attempts are made to hurry up this recovery, a full range of movement will be delayed and may never be re-established.

The same plan of treatment is followed in dislocations; these are reduced by traction and by flexion of the distal phalanx on the proximal one of the joints dislocated. Attempts to hasten recovery by stretching and pulling should be vigorously avoided. This warning applies equally to the stiff finger produced by fracture, and the only method of hastening recovery is active exercise. Heat, diathermy and wax baths are sometimes of assistance if available.

Only a few of the commoner and more important types of injury of the fingers have been mentioned. Their importance has been emphasized and the appropriate treatment briefly outlined.

Guy's of Forty Years Ago—Some Reminiscences

DEAR old Guy's—the happiest days of my life were spent there.

What I miss most on visiting the Hospital now are the old Front Surgery and old Clinical. The Front Surgery was where the present Radiological Department now is. The Surgery opened on the Colonnade and was busiest on Saturday nights, when it was generally filled with " drunks " who had been fighting each other At the back was the Dressers' Room, and between was Sister's Room and a little passage in which was kept a special barrel of beer for the policemen. It was that general fag, the ward clerk's duty to offer the policemen who brought in accident cases a glass of beer, and I never heard of one who refused. The accidents were brought in on

wheeled stretchers, and the legend goes that on one occasion a fractured leg was brought from the neighbourhood of Bart.'s all the way to Guy's !

Above the Dressers' Room was a bedroom in which the two dressers for the week slept and in which was kept the dressers' barrel of beer. The dressers for the week supplied tea and cold supper on the round table in the Dressers' Room, which was served by the ward clerks. There was a large three-handled pewter tankard which was always kept filled with beer, and in the evening any senior student could stroll in and have a drink. In fact, it was a kind of unofficial club-room for all senior students. And what rags went on there ! I remember on one occasion we shut up our House Surgeon, who was a small man, in the cupboard, and Sister Surgery came hammering on the door to say he was wanted immediately.

One of our dressers, who was a teetotaller, was very annoyed on waking up in the morning to find that the beer barrel had sprung a leak during the night and he had to wade in it while dressing. On another occasion we had all been having our nightly potations out of the aforesaid tankard when the dresser for the week retired, saying he felt ill. Next morning he appeared as red as a lobster with scarlet fever and had a very smart attack, poor fellow. But, strange to relate, none of us was infected.

The dressers in those days did quite a lot of minor surgery on their own, and it was a point of honour to refer to the House Surgeon as little as possible. Dear old Pom (Mr. Jacobson) used to let his dressers do a great many operations. If he saw one in difficulties he would gently push him to one side, take up the knife and, after a few deft touches, let him go on with the work. And here may I say how greatly I was benefited by his teaching during my official life in India, where I had a great amount of surgical work to do.

Clinical stood where the Orthopædic Department is now—a dingy building, but the temporary home of generations of the *elite*. Nobody except the physicians and the house physician for the week could enter this hallowed building, except by express invitation. The Clinicals' Room was in front, and here we carried on our investigations and made awful concoctions of raw meat juice, etc. There was a long oak table much darkened by age on which we had our tea. It was the custom for each firm of Clinicals to carve their names on this table. I paid Clinical a visit in 1910, when on leave, at about five, and I found the Clinicals at tea as usual. I looked at the table, but could not find our names. Then one of the boys said, " Perhaps it is there," pointing to the wall. There, sure enough, was the old table top hung up on the wall. I must have seemed a Methuselah to them.

Old Sister Clinical, who had been there for years, looked after us well. At night, about eleven, we were all supplied by her with steaming bowls of hot bread and milk. There was a kind of washing-up room between the Clinicals' Room and the two wards—John and Miriam—which was used for operations. And all our operations were emergencies, as we delighted to take in acute abdominal cases. I very well remember Arbuthnot-Lane operating on a case of general peritonitis. He was flushing out the abdominal cavity with warm saline. The supply failed, so he calmly took a ewer, filled it up at the tap, and carried on with tap-water. The whole place was flooded out, and I can see Sister now hopping around with her skirts held up. Yes, we were great men in those days.

The Clinical for the week was called to see every medical case to be admitted, and that meant every case which was not purely surgical. He had the first pick, and if it was interesting enough in his

eyes he admitted it into his ward. If not, the dross, so to speak, went to the house physician. It was very good for the Clinicals, no doubt, but it also meant that the average student never saw a good many of the urgent abdominal cases and the more interesting and obscure nervous and blood diseases, for nobody below the rank of Clinical was allowed to enter the building.

My fellow Clinicals were John Atkins (now Sir John), Blake Odgers, Stanley Hodgson, Robson and Ralph Thompson, late Genito-urinary Surgeon.

H. CREWE KEATES.

Reviews

Medical Diseases of War. By SIR ARTHUR HURST, M.A., D.M. (Oxon.), F.R.C.P., Lieutenant-Colonel, late R.A.M.C., Consulting Physician to Guy's Hospital, and late Officer Commanding Seale Hayne Hospital for Functional Nervous Disorders; Member of Medical Advisory Committee, Mediterranean Expeditionary Force and Consulting Physician to the Salonica Army, with the co-operation of H. W. BARBER, M.A., M.B. (Cantab.), F.R.C.P., Physician-in-Charge of the Skin Department, Guy's Hospital; F. A. KNOTT, M.D. (Lond.), M.R.C.P., Bacteriologist to Guy's Hospital, and F. A. ROSS, M.D. (Edin.), F.R.C.P., late Medical Director of Cassel Hospital for Functional Nervous Disorders. Published by Messrs. Edward Arnold & Co., London, 1940. Pp. 327, with Four Plates and 32 Figures in the Text. *Price* 16*s*.

WHAT a fellow our Sir Arthur is; always at it, in peace-time and in war, in the heat of the therapeutic battle, in the front of the medical fray, setting up his standard of high aim and waving his pen at us to come on. And so we welcome this work which I have been ordered by the Editor to review, although I told him that I did not know anything about what was in it.

Many people think that the chief thing in war is surgery. It is not. It is medicine. The last war started on August 4th, 1914, and I got back to Guy's on February 19th, 1919—a total of 1,603 days. I commanded a field ambulance from October 4th, 1914, to July, 1918. In that time we were five months in the line in France, getting some casualties every night, and three months in the line in Salonika, getting a few casualties on most nights. The battle of Beersheba took one day, we were three days in the third battle of Gaza, Jerusalem was captured in one day, and the Turks counter-attacked—and did it hard—on some half-dozen days before we got on the move again in February. Then we had one day at Jebel Ekteif before Jericho fell and one for the crossing of the Jordan. The first raid into the mountains of Moab took a fortnight, but was all marching after the entry to the hills was taken with sixteen casualties. The second trans-Jordan raid took about a fortnight, and we had about a thousand casualties. All the rest was medicine.

It is true that I was studying transport as a surgical problem all the time, but it was no more than what all of us do in peace-time in the laboratory or the ward to advance whatever is our chosen subject, over and above our routine work. Except for those specialised surgeons who were stationed as teams at C.C.S.S. or working in surgical wards in base hospitals, this was probably the average experience of most men of my age in the whole of the profession in the last war, and what the young men of the present age have got to expect in this. That is why, when one of them said to me he did not think it was any good joining up until there was something to do, I replied that if he waited till then he wouldn't be any good when there was something. For what does military medicine mean? It means turning your hand at a moment's notice to any blue-pencilled job that can by any stretch of the imagination come into the sphere of a doctor's life, and these are divisible into three. First there is hygiene, the biggest and the most important. It is the clinical medicine of keeping one thousand fit men fit; it includes all that work which has passed out of the hands of the M.O.H. into those of the Borough Engineer since the midden and the cesspool gave place to the water-closet and the sewer; but that is only a small part of it, and the main occupation is giving advice to anyone or everyone on such questions as to whether the troops should wear greatcoats to-day; whether, when there is 2 oz. to spare in the load a man has to carry, it should be allotted to a spare pair of socks or a clean pocket-handkerchief; whether you will sign a certificate to the effect that your unit needs more meat than any other just at the time the meat ration is being cut down, and so on and so on. Then there is the ordinary routine work which forms the main part of therapeutics, and occupies the most time of the profession in peace-time in the form of evening surgeries, visits, and casualty and out-patient departments, and consists in treating the thousands of cases which get well by themselves, and deciding which is the thousand and first case that needs

more highly organised medicine for its care, its cure, or its control.

Many more of the army population must go into hospital than of the civilian because there is no light duty in the army, except for peeling potatoes in the cookhouse from 7 a.m. to 8 p.m., and because you cannot say to a man, " Just go home and take it easy," when home consists of a couple of bivouac sheets shared with another man in a wet hill-side. Then there are also those diseases which arise in war and do not occur in peace-time—and this brings us back to where we started with Sir Arthur Hurst and his book on these diseases.

I was a sorter-out of diseases—a disease sorter-out is what I was—and I should not say much about the first fourteen chapters, which deal with the hysterical conditions that arise from war, though I might have been the cause of quite a lot of them. One cannot say. It is the business of the M.O. of a battalion to keep his unit together. It is one of the functions of a field-ambulance commander to keep his brigade group together, and the rough working rule that I used was that no one was to go past me unless he could show some objective physical sign to account for any subjective one. It is a rule that is open to many objections, but unless someone can give me another that is not open to more and greater, I think I should use it again if I got back into the same position—which I shan't. It may result in the development of hysterical contractures, but I do not think so. Most of these came from the various causes discovered by Sir Arthur and not from the firmness or brutality—according to your point of view—of a senior officer refusing to let cases go down the line unnecessarily.

Under malingering, Sir Arthur says very truly : " The diagnosis of hysteria from malingering is exceedingly difficult," but I am sorry he does not lay more stress on the fact that there is no strict borderline between hysteria and malingering, for I believe I learnt this from him and I am sure that it is true ; whereas I do not believe that the following is : " The threat of a court-martial may produce sufficient emotional disturbance to cure hysterical symptoms, but has no influence in a malingerer, who may prefer prison to the trenches." I do not believe you cure hysteria by threats ; your successful psycho-therapy is essentially kindly, though it must be firm ; but the hoary old lead-swinger won't face a court-martial. At the first suggestion of it he assumes an air of offended dignity at the insult to his character that he should be suspected of such a thing, and goes back to work with an expression, a stance, and a gait designed to register this, while really he rather respects the M.O. who has caught him out. There is always a bit of the actor and the gambler, combined with a sense of humour, in the lead-swinger, which makes you love him though you must not show it.

One of the most important medical subjects of war is that of " shell-shock." " There would have been no objection," writes Sir Arthur, " to to the term ' shell-shock ' if it had been reserved for the conditions which follows exposure to the forces generated by the explosion of powerful shells in the absence of visible injury to the head or spine." Well, if it had been, they would have had to have invented some other pithy term for the other and more important type. Where the term came from I do not know, perhaps not from the medical services at all, and to the layman the word " shock " does not necessarily connote " forces generated " ; it can mean " a sudden and disturbing impression on the mind and feelings," and the constant reiteration of this exactly describes what happened to the poor fellows with " shell-shock," to which was added the strain of responsibility. They were not cowards any more than the rest of us. Many were brave to have stuck it so long. I do not think that they were more frightened than we were. They did not jump and shout when an explosion went off near them. I sometimes think that those of us who did exorcised some devil thereby. They just shivered and they shivered silently. You could not see it, but you could feel it. They tried to hide it, to mask it, conscientiously to go on with their work, but they could not and gradually became inefficient. No amount of threats would help ; they were trying their best ; no adjurations to " Pull yourself together, old man," were any help ; they had been doing that for days, and perhaps for weeks before the other spotted them. Alcohol was the only thing that helped, when they took to it, not all did, and that but temporarily, till it became almost momentarily. Alcohol in larger tots with less water till they just could not stand it.

I remember being up the line one day when there was such a case at Battalion H.Q.—a captain, a good fellow, an efficient officer out of the line. The C.O. and the M.O. talked it over with me as to whether I would send him down the line. It was either that or reporting him as inefficient. I said, " Yes " ; if they sent him down that night I would keep him at the dressing station for a few hours and send him on. They implored me to take him back with me and not to prolong the poor fellow's agony until after dark. I agreed, though he did not look fit to do the long walk down the communication trench. Just then there

came along a little train. It was a tiny thing like the toy ones that duchesses, lord mayors and actresses ride in when they are opening a charity bazaar. It was used for bringing up engineer stores and was going back empty. The C.O. asked if they would take us, and, seeing it was a casualty, the R.E. driver agreed. On the truck there was just room for the two of us. He sat on something, I forget what, and I stood behind, but, to preserve my balance, had to rest my hands upon his shoulders, and off we went.

It was a lovely autumn afternoon, a blue sky and floating clouds, warm with a cool breeze, and all around the rolling country with many plants growing up that one does not usually see in bloom like beets and cabbages, self-sown for two years from crops ungarnered in 1914. And everywhere too, poppies, daisies, and the cornflowers blue. These last have always been to me most typical of the time and place, and I have wondered why it was the poppy and not the cornflower that became the emblem of the war, which then seemed so far away. On our right were rolling fields up to the twin towers of Mont St. Eloi, behind us was the Vimy just as you can see it to-day from Roclincourt or St. Marœuil. Only now and then as you looked round you saw a white puff far away and then you heard a boom. But with each boom I felt a shimmer pass through the body of the poor fellow on whose drooping shoulders I had my hands as he sat before me listless, looking at nothing and with nothing to say. These cases I cannot find described within this book. They do not fit in either with Sir Arthur's "True 'Shell-shock'," nor with his hyper-adrenalism. They are quite distinct from the "Anxiety Neuroses of War," described by Dr. T. A. Ross. Perhaps they never got into a base hospital.

Readers of "Obiter Dicta" will remember how in his preface the author praises the essay in "Falstaff" which is "by another hand." Sir Arthur Hurst may well do the same by Dr. Ross, for this is excellent. It is intelligible even to me who has not previously understood any writing on psychology, replete with worldly wisdom spun in with modern knowledge and expressed in language that can be "understanded of the people." But to praise Dr. Ross is not to belittle Sir Arthur. To compare him with Mr. Augustine Birrell is praise of the highest; the point to make here is the protæan nature of his activities. We have dealt with but half the book and find that, written from the standpoint of the physician for whom illnesses are already in part selected, he strikes thoughts and memories out of the mind of a sorter-out of diseases who saw these things from an entirely different angle. We purpose to return to this book in our next issue and to consider the wealth of varied material that remains in the other half.

T. B. L.

A Handbook for Nurses. By J. K. WATSON, M.D. Published by Messrs. Faber & Faber. Eleventh Edition. *Price* 12*s.* 6*d.*

DR. WATSON'S new revised edition is to be recommended as a most useful guide and book of reference to nurses—from the junior probationer to the nurse about to take her State Examination.

The many members of the nursing profession already familiar with this book will welcome the eleventh edition with its many new and helpful additions.

Much has been added to the chapters on X-rays, anæsthetics, diseases of the ductless glands, and the specific fevers. Entirely new chapters have been written for the use of midwives.

Noteworthy amongst the numerous illustrations are the coloured plates showing clearly various affections of the pharynx, and the rashes peculiar to the specific fevers.

D. C.

Textbook for Nurses. By GROVES, BUILDALE and NIXON. Published by Humphrey Milford, Oxford University Press. Sixth Edition. *Price* 21*s.*

THIS book is described as a "comprehensive textbook," and this is, if anything, an understatement. There are four main parts, each dealing in an incredibly detailed manner with their several subjects—anatomy, physiology, surgery and medicine. Also included are subsidiary chapters on dietetics, clinical methods of diagnosis and treatment, poisons and their antidotes, and—an unfortunate necessity in this civilised age—poison gases. "Groves and Buildale" has always been considered one of the most valuable textbooks for nurses in training, and of equal or even greater value to the trained nurse. This new edition of a nursing classic should be welcomed by the nursing profession.

S. S.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Sector News

Guy's Letter

THIS week-end, without hurry or alarm, we have set our house in order. A flurry of telegrams, perhaps, as we abandoned the planned escapades of our Whitsuntide, some hard organising under a blazing May sun in order to arrange the disposal as necessary of our cases, and then we stood, and stand, prepared for what may come. Our troubles are trivial ones and we have no regrets, but this predilection of the Fuehrer for spoiling our week-ends will stand him in no good stead. Should any parachutist be foolhardy enough to alight in the Borough High Street, we trust we shall be absolved from the Hippocratic Oath as we deal with what remains are brought into our Surgery.

Evacuation of patients proceeds smoothly, and the organisation is under constant review with the object of increasing efficiency wherever possible. By a recent modification, out-patients who proceed straight to the Bases for in-treatment travel on Thursdays, whilst our own patients are evacuated on Friday mornings. An important privilege has been granted in regard to the care of our babies and children. Any child who needs hospital treatment, whether seen in Front Surgery or Out-Patients, may now be admitted to the Hospital for a night or two and then speedily transferred to the care of our pædiatricians at the Bases. We shall no longer have the annoying experience of sending child after child away to L.C.C. hospitals, whilst the fresh country air of itself must have a potent salubrious effect upon the Borough children. We envy our colleagues at the Bases these days, but we have our consolations. The two new squash courts have been finished and corporations are rapidly diminishing around us; the swimming bath is unfortunately still *hors de combat*, but the long climb up to Nuffield roof brings its own reward of refreshingly cool air and a view of the ever-moving panorama in the Park below.

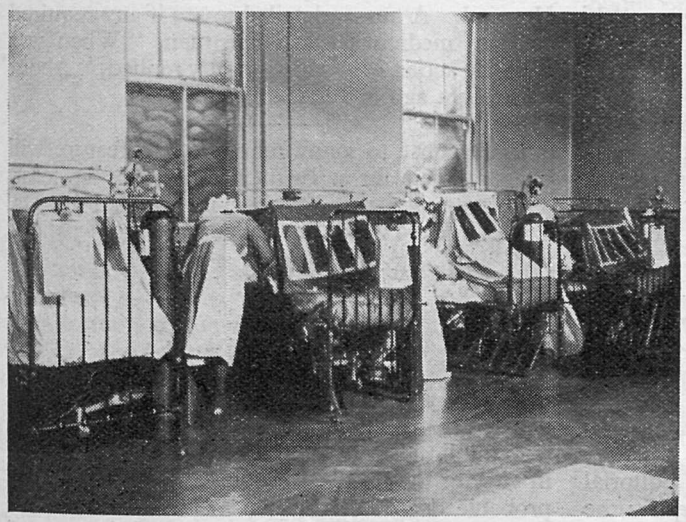
We note with interest the new measures to be taken against neutral aliens in this country; in the near future, when personal feelings and prejudices are quieter, we wish to start a discussion in the hope that it may temper the extreme views we hold upon this subject.

N. A. N.

Pembury Letter

EVENTS in the Low Countries have not been without their repercussions on Pembury, and there has been some activity making preparations for possible eventualities. Calm reigns supreme, though many rumours are in circulation, some no doubt well founded. We feel certain that, when called on, Pembury will be second to none in doing its duty. Our pædiatric unit especially works extremely well, and one feels that its country existance should continue after the war is over. Bermondsey was never an ideal environment for children. We have been fortunate in procuring for this department much of the Guy's equipment, but we are sorry to say this is not true of all the other departments. We would bring to the notice of the authorities that one sphygmomanometer, one doubtfully functioning ophthalmoscope and one theoretical auriscope is totally inadequate for a hospital the size of Pembury. We trust that these remarks may fall on the eye of the correct authority, that they will receive sympathetic consideration and prompt action. We cannot subscribe to the view that medical diseases are entirely a matter for primitive methods.

Since our last letter we have welcomed Cooper, Babrow and Halamandres to the Residents' Flat.



Four oxygen tents in one corner of childrens' medical ward (Guy's Unit) Farnborough

The athletic ability of this abode is now at its zenith, and parachute troops had better land elsewhere.

N. M. J.

Orpington Letter

IN the last Orpington letter the arrival of the first convoy of sick and accident cases in Sector X was ably described with subtle humour by the writer, who has unfortunately now left us to grace Farnborough with his presence. I refer, of course, to Reynolds, whom we were very sorry to lose, though the rodent population of the hospital must surely be glad that this nocturnal hunter, complete with torch and rifle, no longer molests them in their search for sustenance.

The convoy has brought with it many problems, medical and others, some of which almost come within the Syd Walker category. With the help of the R.A.M.C. staff we have been submitting army forms to our already inundated Superintendent for his criticism and approval, hurriedly altering them at his suggestion and resubmitting them, and to-day we see the fruits of our labours. The first Army Medical Board has arrived, and, so far as we as house officers are concerned, is in secret session.

The past fortnight has also provided new exciting episodes, and it was a pleasure to see the efficiency with which one of our senior staff dealt with such diverse happenings as a schizophrenic tampering with the Group Officer's car, slightly inebriated gentlemen, one whom was unfortunately told, " Now, behave like a good chap and go to bed with Sister," in Sister's presence, and the arresting over the telephone of one gentleman who apparently preferred the Pottery district to the amenities of Orpington.

In conclusion, we congratulate Roberts on his marriage. The writer of this has not the pleasure of knowing the bride, but many Guy's people do, and I am sure that they will join with me in wishing them a long and happy married life.

We have also to welcome Bucknall, who has come to replace Reynolds. He has for the last week been struggling with the M.B., in which we wish him every success.

R. A. J.

This Medicine

One of my patients arranged for her younger sister to keep house for her during her confinement. One day the sister said to me: " My word, Doctor, I have learnt a lot. You know, I always thought that Perineum was a Roman ruin."

Extract from doctor's letter accompanying a specimen of fæces, addressed to laboratory.—" If you find B. Coli you will, of course, at once prepare a vaccine."

" It would indeed be rash for a mere pathologist to venture forth on the uncharted sea of the endocrines, strewn as it is with the wrecks of shattered hypotheses, where even the most wary mariner may easily lose his way as he seeks to steer his bark amid the glandular temptations whose siren voices have proved the downfall of many who have gone before."

(*Extract from Boyd's " Pathology," p.* 772.)

An Incident during the last war.—A convoy of wounded had recently arrived at a Red Cross Hospital. A nurse, detailed to see if any required aperient medicine, asked one man, " When was your last action ? " He promptly replied, " About a fortnight ago in Flanders."

In response to many requests, this feature will be continued for a further two issues at least. The prize for this number is awarded to Dr. L. G. J. Pitt-Payne, Beckenham, Kent.

Correspondence

Guy's Hospital Reports

To the Editor of the GAZETTE

SIR,—At a recent meeting of the editorial committee of the *Guy's Hospital Reports* the question of continuing publication during the war was discussed. It was unanimously decided that every effort should be made to maintain publication as a quarterly journal, although in view of the need for economy in paper and the probable dearth of suitable material the number of pages in each number should be reduced. I

think that all Guy's men will agree that it is desirable to try to keep the *Reports* going because of the proud position which they hold as a leading hospital journal. It will only be possible to continue publication if support is given, and I hope that all who have articles to write will remember this and submit them for publication in the *Reports*. In addition, it should be made known that the financial position of the *Reports* is precarious, and I sincerely trust that those subscribers who have not renewed their subscription this year will reconsider the matter.

I am sure that it would be of great interest to your readers to know that the last number of the 1939 series, which has been unduly held up owing to the war, but which is about to be published, will be a special Hurst number dedicated to Sir Arthur Hurst in commemoration of the nineteen years of his splendid editorship. This volume will contain a striking portrait of Sir Arthur, a complete bibliography both of his writings for the *Guy's Hospital Reports* and his contributions to other journals, and will contain reprints of many of his more important papers that have appeared in the *Reports*.

This number will, of course, be sent in the usual way to all subscribers, but I am sure that many Guy's men, especially those who have worked on Sir Arthur Hurst's firm or been his clinical assistant or house physician, would like to possess a copy of this number. Arrangements are therefore being made to print extra copies of this issue, but it will be easier if orders are given before publication, so that there should be no wastage. If ordered now, the cost of this special number will be 8*s*. 6*d*. instead of the normal publication price, 10*s*.

Yours, etc.,

R. C. BROCK.

Guy's Hospital,
S.E.1.

"Our Park"

To the Editor of the GAZETTE

SIR,—For the information of "Ex Rure Salus," I would like to explain that the chains were taken down from around the grass lawns in the Park on account of the black-out, as we were afraid of people tripping over them and claiming compensation for the resultant injury.

Now that the black-out starts after 9 o'clock, by which time few strangers should be wandering about the Park, I have felt that the chains no longer constitute such a menace, and they have now been painted white and replaced.

May I thank your correspondent for bringing the matter to my notice? I share his hope that the grass may not be beyond recall.

Yours, etc.,

P. M. F. BISHOP,
Deputy Superintendent.

Guy's Hospital,
S.E.1.

Orthopædic Surgery and Fractures

To the Editor of the GAZETTE

SIR,—In the review of Watson-Jones's "Treatise on Fractures," published in the last issue of the *Gazette*, your reviewer takes exception to the statement that "the treatment of fractures cannot be divorced from general orthopædic surgery." He states that he would like to delete the word "orthopædic" from this sentence, and maintains that, given the necessary training and interest, there can be no reason why a general surgeon should not conduct a fracture clinic as successfully as his orthopædic colleague.

How should a surgeon, who intends to take an active part in the treatment of fractures, be trained? It is perfectly obvious that the many and various problems that the surgeon will encounter are essentially orthopædic in nature, for in the management of any fracture, both reduction of deformity and immobilisation are based on well-established orthopædic principles, as is also the treatment of any complications and difficulties, immediate and remote, which may arise. A sound orthopædic training is, therefore, of first importance, and this can only be acquired by the whole time and continuous practice and study of orthopædic surgery. As a result of this training the surgeon will be able to select the best form of treatment for any individual fracture; he will acquire special skill in the application of plaster of paris casts and in the use of skeletal splints; he will be thoroughly famaliar with orthopædic operative technique and with the various bone and joint operations that he may be called upon to perform. He will also have made a special study of the use of physical methods, of occupational therapy, and of rehabilitation in relation to fractures, and he will be able to give an expert opinion on assessment of disability. He will be able to deal with every phase and detail of fracture treatment and the anomalous state of affairs, whereby one surgeon carries out the primary treatment and refers complications, such as non- and mal-union, to another surgeon, will cease.

It is sometimes argued that many orthopædic

surgeons have had no experience in the treatment of fractures and are, therefore, not competent to treat them. This, however, is a ridiculous argument, for the treatment of a fracture is based on the application of orthopædic principles and not on the use of somebody's method. In its Senior Orthopædic Surgeon, Guy's has a man who would not claim to an extensive fracture experience, but who, nevertheless, has produced work of considerable value in fracture surgery. Moreover, may I point out to your reviewer that the duty of a specialist is to make his work simple, and the assertion that he makes it appear difficult, in order to protect it from the clutches of others, is merely the refuge of the ignorant.

It is now accepted that fractures should be segregated and treated in well organised clinics. There are already many clinics throughout the country and in London, directed in most cases by orthopædic surgeons, in many instances at the specific request of their general surgical colleagues. This movement will undoubtedly spread, and will result, not only in more efficient treatment, but also in better teaching for students.

I hope that further consideration will remove from the mind of the reviewer the obscurity that appears to cloud it at present. The problem of fractures is a large one, and there are many who have no conception at all of its magnitude.

Finally, may I suggest to you, Mr. Editor, that an important work, such as that by Mr. Watson-Jones, should be reviewed by a specialist in that particular branch of surgery. Your readers would then be supplied with valuable and well-informed reviews.

Yours, etc.,

J. S. BATCHELOR.

79, Harley Street,
W.1.

The Medical and Dental Schools

To the Editor of the GAZETTE

SIR,—Since it was made known officially that the Medical and Dental Schools were returning to London in October, there has been a considerable amount of discussion concerning the justification for the move. This is not surprising, for the reasons which led to the evacuation of the schools last September, at the outbreak of war, are still quite valid now that the war is entering a more active phase. The fact that, up to the present, there have been no air raids on London is no guarantee that we are safe for the rest of the war.

But no one knew what to expect, and in the uncertainty most of us took a rather pessimistic view of what the future would hold. Inevitably there was a certain amount of subconscious panic, although very few people will admit it. This was perhaps a good thing, because it is only when thus goaded into life that the average Englishman and still more, the average English Board or Committee, will take decisive action. At this time it was seen fit to transplant the Medical and Dental Schools out to the country. Now that the enthusiasm and novelty have passed off, we can weigh our situation without bias and pass purely objective judgment on the value of, and lessons learnt from, evacuation.

Evacuation was carried out in order to make sure that early medical and dental education could be continued uninterrupted; the guiding principle was that the teaching and education of future doctors and dentists should have first consideration. Now, after seven months of war, we are told that the schools are to be moved back again to London. This will not be in the interests of learning. There must be, therefore, other reasons which have led to this decision.

Primarily, financial reasons. It is obviously a great expense keeping the Medical School both at Guy's and at Tunbridge Wells, but the financial position of the Medical School cannot have deteriorated gravely in seven months. There must have been sufficient money to permit evacuation last September, and unless the cost was grossly miscalculated and Sherwood Park has proved more expensive to maintain than was anticipated, there can be no new financial reason. If the School Council knew that it could not afford to keep two places for more than a year, it was hardly justified in going to the expense of evacuation at all. Even then the duration of the war was conservatively estimated at three years (by Mr. Winston Churchill), so the Council must have known that a stay for more than twelve months was probable. If, of course, the financial burden is truly intolerable, the return is imperative and nothing more can be said against it. But I cannot believe that evacuation could have been carried out in the first place if it were realised that it was a financial impossibility. The financial reasons for returning may seem to be pressing, but are not urgent.

Secondly, the other London medical schools are returning or have already returned to London, and it may be thought that, if Guy's Medical School were to stay in the country, the number of new students entering would be smaller. Small numbers represent a relative financial loss, but a definite academic gain; so the optimum number is the smallest number which is compatible with

financial security. Personally, I believe that the fact that the Medical School is in Tunbridge Wells will have little effect on the number of entries when its benefits are more widely realised. For one thing, teaching is quite as good and many think that it is better than in London. This should in itself dispel all doubts in the minds of prospective students.

It has also been said that living in Tunbridge Wells is more expensive for the students; this is not really an important point or one with facts to support it, for the majority would be living in "digs" if they were in London, and the extra expenses can hardly equal those of London. The cost of living having gone up everywhere because of the war, people are led to think that it is life in Tunbridge Wells itself which is the cause. This view, of course, is wrong.

To leave the material aspects; everyone is aware how much one's health is improved in the country and how much fitter one feels. Students would gain much by more healthy surroundings; it would benefit their general health and so indirectly their capacity and inclination for work. Surely this is another good reason to try and stay out of town. There is also the great saving of time and energy by living close to the Medical School, which means that more time is spent in more profitable pursuits.

Another complaint against the country life is that pre-Clinical students are missing something (what, I do not know) by being away from their Hospital. This is an argument which holds no water, because pre-Clinical students never really come up against Hospital life until they start clinical work.

A return to London before the end of the war means another big upheaval for everyone, and the original danger from air raids is still present. All the expense and worry of evacuation will have been for nothing, and the whole object, which evacuation was meant to attain, unachieved. Taking into account the higher standard of teaching, the students' interests and the relief of congestion at Guy's, besides the immediate danger from raids, the Medical and Dental Schools would derive every advantage from a prolonged stay in Tunbridge Wells. In fact, the advantages are such that if the School Council were to decide to make Tunbridge Wells the permanent home of the two schools, they would, by this new departure, greatly benefit the students' interests. Such a move would be no small break with tradition, but now is the time, during this present fluid phase of events when important and far-reaching changes of this nature can most easily be effected.

Unfortunately, at this stage of the war there is a mass rush back to the towns by medical schools, colleges, business houses and everyone. The business houses certainly are dependent for their livelihood on London, which is still the economic hub of the world. But inasmuch as it affects us here at Guy's, or more accurately the pre-Clinical students, not only is there no real reason for returning, but a great opportunity for improving the students' preliminary education may be missed through simple shortsightedness and failure to look into the future.

Yours, etc.,

P. N. SWIFT.

Military Service

To the Editor of the GAZETTE

SIR,—I entered the R.A.M.C. with very mixed feelings. I was going to do no more medicine; I would be bored stiff. I would probably be stationed in some out-of-the-way place in the Maginot Line with nothing to do. I began to wonder why I had ever volunteered. Such were my feelings when my papers came through. At Hospital it was the current opinion, and was even supported by some of our former colleagues who had joined up and who had spent all their free time in the College. Little did we realise that by far the greater proportion of our military colleagues was far too busy to come back to Guy's and tell us the true situation.

Five of us "came in" the day I joined for duty. Three had left their homes, their families and their practices. I felt a little guilty about the fact that only two of us had come from Hospital, whereas three had given up so much in order to join in this war.

In our present area of over four thousand square miles there is sufficient clinical medicine to occupy twice the number of medical officers available. The men here are in training, but are in such great numbers that the incidence of ordinary peace-time ailments is correspondingly high. As the army is constantly expanding, the need becomes more urgent. Yet we are supposed to be able to deal with casualties as well as with ordinary ailments, when the need arises.

I am convinced that a regimental medical officer needs an even greater degree of clinical acumen than he does in hospital or private practice. It is true that treatment may sometimes be hampered by the small amount of equipment which he has,

but he is not called upon so much to treat his patients as to see them under all conditions, often briefly, and to dispose of them with the least possible loss to his unit.

I must now admit that I have changed both my dress and my opinions, but I am satisfied that the country needs doctors urgently and have found that even in an administrative post, my small store of clinical experience is taxed to its utmost, and I am continuing to learn in the good old Guy's manner—by doing the job.

Yours, etc.,

LIEUTENANT, 28 D.A.M.S.

Somewhere in England.

Guy's Hospital Photographic Society

To the Editor of the GAZETTE

SIR,—The first General Meeting of the Guy's Hospital Photographic Society was held on Wednesday, May 1st, at Sherwood Park. Fourteen students were present. The following were elected: Chairman—Dr. J. Willis; Committee—Mr. F. Staines, Mr. V. Bockner, Mr. T. A. Morris.

The next meeting was fixed for May 22nd.

It is hoped to be able to start a postal portfolio among the base hospitals. If any persons interested at the base hospitals could get together and communicate with me at the above address it would be a great help.

It is hoped that we shall soon have some darkroom facilities at Sherwood Park.

Yours, etc.,

D. H. NORMAN,

Secretary.

Guy's Hospital Dental School,
Sherwood Park,
Pembury Road,
Tunbridge Wells,
Kent.

No Resident Dentist

To the Editor of the GAZETTE

SIR,—We pride ourselves on having the best Dental School in the country, and yet we have no resident dental officer.

When the Dental Department is closed, all patients requiring urgent dental treatment in the Front Surgery are either dealt with by persons unqualified to do so, or are referred elsewhere. As recently as last week-end I had to send a patient with a small, but very painful, alveolar abscess to King's College Hospital; imagine their reactions when the patient said, "I went to Guy's, but there is no dentist there to-day."

Why have we no resident dentist?

Yours, etc.,

"HARASSED O.P.O."

Guy's Hospital,
S.E.1.

Sport

Rugby

Guy's v. Rosslyn Park

(Played at Honor Oak Park, Saturday, April 13th)

THE last match of the season was played against Rosslyn Park before a fair crowd, and resulted in a win for the visitors by 1 penalty goal, 3 tries (12 points) to 2 penalty goals (6 points). This game should have been played at Old Deer Park, but the venue was changed owing to the Middlesex seven-a-side being held at Richmond.

Guy's fielded what to all intents and purposes was their best team, with Osmond, Phillips and Lewis returning, and Babrow and Harrett continuing their happy understanding at half.

The first half was very close, and Guy's outsides moved with such freedom that several of their movements were worthy of a score, but they were well tackled. A feature of this half was the number of kicks given against Rosslyn Park for scrum infringements. From these, Mullins was able to score two goals, the second being a long raking kick from the touch-line.

Rosslyn Park also put in some strong attacking movements and crossed our line twice through Stone and Huxley. Phillips was crocked towards the end of the first half and went on the wing, but his ankle injury compelled him to retire for the rest of the game. The half-time score of 6—6 was a good reflection on a rousing first half.

The second half went almost entirely in favour of Rosslyn Park. Mullins went on the wing and Guy's packed 3, 4. The opposing forwards immediately made it a forward game, and their rushes were always dangerous. Guy's did remarkably well to hold them, and in addition found time to make a few spasmodic raids to the opposing line.

During this half Guy's seldom got the ball, and Harrett had little chance of getting his outsides going. Guy's tried to improve matters by playing Fuller on the wing, but this was no more successful. It was no surprise when Cooper went over for an unconverted try for Rosslyn Park. This was followed by a penalty awarded against Guy's for

a scrum infringement in front of the posts, which Chapman easily converted.

Lewis had an excellent day, fielding the ball well, and kicking with remarkable length and judgment; indeed, his play was faultless throughout.

Team.—T. L. T. Lewis; P. C. Gartrell, J. H. Phillips, R. U. F. Kynaston, J. P. Crawford; L. Babrow (captain), P. V. D. Harrett; D. P. Finnegan, H. F. Osmond, D. N. Fuller, J. R. D. Williams, J. C. Bulstrode, M. R. Mullins, T. W. Renton, A. G. Albers.

Worth It

(To M. A.)

Half-dazed with pain and feeling deadly ill,
Daily my wretched plight grew worse and worse;
Defying morphia, medicine, poultice, pill,
Till Doctor said: "Well, you must have a nurse."

At once I saw a starched, forbidding dame,
And guessed the bag of ominous things she'd bring;
To cram me with loathed food would be her aim,
Plus endless dosing, washing, fidgeting.

She came; I looked; oh, what could this portend?
'Twas sure just sheer hallucination's view;
Pain must have wrenched my tortured nerves on end.
"Kind Heaven," I thought, "this can't be really true!"

But true it was; I ventured one more glance;
Yes, there she stood, nor seemed to fade away.
At last I dared to face as fact what chance
Had meted to me on that fateful day.

Picture one shell-shocked, whom some fearsome dream
Drags to the dreaded verge of zero-hour;
Who climbs the parapet to find—a beam
Of peaceful dawnlight blessing field and flower!

For deafening gunfire, song of birds in bliss;
For poison-gas, a breath of new-made hay;
For barbed wire, trails of wilding clematis;
For smoke clouds, azure of a summer day!

I rubbed my doubting eyes, and rubbed again,
Saw Help Incarnate bent above my bed;
Blue wide-set eyes, a strong sweet mouth, and then—
"Shure, I've to help ye to get well," she said.

Yes, even a soothing brogue enriched the tone
Which from that hour brought solace to my cares.
"Be brave!" some Presence breathed, "you're not alone!"—
An angel, "entertained" all "unawares"?

Yet angel aid I'd claim not overmuch
(A sick man's thoughts oft run a fevered course).
Only I knew the uplifting human touch
That brought communion with some higher force.

And many a time in anguished hours by night,
Sunk drowning 'neath the leaden waves of pain,
A hand would raise me back into the light,
A whisper help me to take heart again.

(Nurses, you wield a wondrous boon to life;
Great is your skill to make our bodies whole.
But great as any power of drug or knife
Is yours—to fortify man's lonely soul.)

So, Help Incarnate, Turner of Fate's tide,
God give you all you've made it yours to give;
And, what though pains and weariness abide?
'Tis worth them all to learn such women live.

P. HABBERTON LULHAM.

Hospital Information, etc.

Notice

SOCIETY OF APOTHECARIES OF LONDON

Dates of Examinations

Biology.—July 1st, 3rd.
Anatomy, Physiology, Materia Medica and Pharmacology.—July 1st, 3rd, 4th.
Surgery.—July 8th, 10th, 11th.
Medicine and Forensic Medicine.—July 15th, 17th, 18th.
Midwifery.—July 16th, 17th, 18th, 19th.

Nursing News from all Fronts

Miss Margaret E. Thorpe, Q.A.I.M.N.S., Royal Victoria Hospital, Netley.

Miss C. J. Reynolds, Tynrhas, Bridport, Dorset, from South Africa.

Pass List

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

L.D.S.

FIRST PROFESSIONAL EXAMINATION.

April, 1940.

Dental Metallurgy.

D. J. Anderson
E. H. Archard
K. A. Barnett
C. G. Bason
R. H. Beare
L. R. E. Bradford
G. A. Brown
J. Bunch
C. G. Chester
G. C. Christian
D. F. L. Cook
P. C. J. Crisp
T. P. Dalton
A. J. R. Davies-Evans
D. R. Edwards
J. H. Farrell
A. J. Hayward
D. T. Humphris
R. J. Hunter
R. E. Hyman
G. E. Johns
A. C. Keith-Fraser
P. H. S. Lahaise
R. C. Lawrence
A. Lister
G. E. Meech
D. Middleton
R. Middleton
N. D. Miller
C. P. Murch
H. W. Palowkar
G. N. Pleasant
D. A. Reaney
J. G. Richards
I. T. M. St. George
F. B. Sartory
V. L. Simons
J. N. Staniforth
M. Suskin
S. H. B. Taylor
R. A. S. Tipper
N. J. Whelpton
J. K. Yerbury

Dental Mechanics.

S. E. Blockley
G. S. Chase
T. P. Cheevers
G. L. Cocker
B. J. Dupree
P. G. C. Farrant
T. P. Grudgings
A. A. Halamandres
R. J. Hunter
G. G. Jackson
R. C. Lawrence
J. Lazansky
N. A. Lee
W. L. Oakes
H. W. Palowkar
R. A. S. Tipper
D. C. Steven
D. E. Williams
T. W. H. Woodward

Anatomy and Physiology.

B. M. Barker
A. Brown
B. H. Dicker
D. A. Reaney
S. H. B. Taylor

Special Anatomy and Physiology.

M. Barber
J. S. Breen-Turner
G. S. Chase
P. Cohen
D. R. Corless
J. Cranfield
J. W. Drury
P. G. C. Farrant
J. W. Forrester
T. P. Grudgings
T. J. Hancock
D. A. S. Harvey
D. R. Hone
W. H. Hudson
G. G. Jackson
M. A. Kettle
J. Lazansky
G. Morris
C. P. Murch
D. A. T. Payne
J. A. Powell
W. L. Renouf
J. F. S. Rumble
W. B. Sanders
N. Stark
D. C. Steven
S. P. Vorster
F. M. Wood
T. W. H. Woodward

Papers by Guy's Men

Hogbin, F. R. Report of the opening of the New Bristol Dental Hospital. *Dent. Gaz.*, 1940, vi, 453.

Guy's Hospital Reports.

1939, Vol. 89, Pt. 3.

Contents.

Campbell, Maurice. Edward Palmer Poulton. Pp. 251-261.

Brock, R. C., and Spurrell, W. R. Direct measurement of the pulmonary blood-pressure in man. Pp. 262-266.

Eckhoff, N. L. Achalasia of the cardia with œsophageal ulcer. Pp. 267-273.

Mann, W. N., Sundberg, Stig, and Herbert, W. E. Cancer of the stomach in London, in Stockholm and in Amsterdam. Pp. 274-284.

Holling, H. E. The ætiology of vascular symptoms occurring in cases of cervical rib. Pp. 285-295.

Turner, Philip. Varicose veins. Pp. 296-300.

Robin, Ian G. Malignant disease of the maxilla. Pp. 301-329.

Knott, F. A. Red cell sedimentation rates in asthma. Pp. 330-333.

Swift, P. N., and Stanley, R. J. Notes on two cases of congenital abnormality of the zygomatic bones. Pp. 334-336.

Kessel, F. K. Orbito-ethmoidal osteomata with intracranial complications: Report of a case. Pp. 337-346.

Schott, Adolf. The diagnostic value of the electrocardiogram in cases of chest and upper abdominal pain, with special reference to serial tracings taken after an exercise test. Pp. 347-363.

Reeve, E. B. An historical note on "Murphy's Sign" of gall-bladder disease. Pp. 364-368.

Rushton, Martin A. A case of dentinal dysplasia. Pp. 369-373.

Changes of Address

W. B. Clegg, Lt. R.A.M.C., 7th North Staffs. Regt., Rugely, Staffs.

G. F. Daws, Lt. A.D. Corps, Military Hospital, York.

R. Hudson Evans, M.R.C.S., L.R.C.P., Broxton, Briarfield Road, Heswall, Cheshire.

David E. Sharp, B.D.S., 1, King Street, Sudbury, Suffolk.

Appointments

David E. Sharp, Hon. Dental Surgeon, St. Leonard's Hospital, Sudbury.

Sydney B. Smith, M.R.C.S., L.R.C.P., Hon. Assistant Surgeon, Manchester Royal Eye Hospital.

Births

PAYNE.—On May 5th, 1940, to Zoe, wife of R. Vaughan Payne, M.Ch., F.R.C.S., of Windsor—a daughter.

KEATES.—On April 26th, 1940, at Colchester, to Mary Gwyneth (nee Williams), wife of Major G. H. W. Keates, R.A.M.C.—a son.

Deaths

SUTTON.—On May 9th, 1940, at Ard-na-Carrig, Littlehampton, Charles Robert Arnold Sutton, M.A., M.D.

MANNING.—On May 12th, 1940, at the Royal Masonic Hospital, London, Harry Paul Owen Manning, M.R.C.S., L.R.C.P., aged 78 years.

EDS. { N.A.N. B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

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PASSIM

NOW that the war has entered into its grimmest phase, our country has at last come to realise that she is indeed fighting for her life. We welcome the energetic steps by which the Government has assumed almost totalitarian powers over us all, for it is only by the achievement of the highest degree of efficiency in all activities that success can be obtained.

It is a national characteristic of ours to grumble, and we value highly our tradition of unrestrained criticism of those about us. Criticism is seldom constructive, and its achievements, however valuable, are always slow to realise; to-day, our duty is plainly to adopt an almost blind faith in our elected leaders and to accept, without question, for the next few months their pronouncement that the appropriate Minister of the Crown shall be the competent authority in each branch of our national life. For the rest, we have, each of us, our appointed task to perform in a vital section of national service. One and all, our instinct is to abandon our comparative inactivity and to join one or other of His Majesty's Forces, but we are stationed in this sector for a very definite purpose. Our first regard must be to ensure that every detail of our organisation is perfected and every possible emergency anticipated. The mother hospital and the allied base hospitals possess three very vital functions. Firstly, it is essential that the high standard of medical education of this country should be maintained. In fulfilment of this purpose, those of our honoraries who remain in civil life are devoting a large portion of their time and energies. Of almost equal importance is the full-time teaching provided by a very capable staff of registrars. Clinical lectures and revision lectures are in full swing; the Out-Patient Department still provides ample clinical material. In the wards alone, our scope is of necessity rather limited, but ward rounds are as popular as ever, and by the rapid transfer of cases as much interest as possible is created in the limited number of beds available for in-patient treatment. Secondly, it has been our endeavour to provide a health service for our Borough folk as efficient as in pre-war days, both in treatment and in accommodation. The facilities provided by the Base Hospitals have enabled this ideal to become a practical possibility, whilst leaving also foremost in our minds our organisation as a unit sector in the Emergency Medical Service. For this latter purpose we must hold ourselves prepared to receive and to treat all serious casualties in our district that result from air raids, so far as our capacity permits; at the same time, we must have always in reserve ample accommodation for the reception of convoys of wounded at a moment's notice. This organisation is under constant review, and so far as practice can make perfect we are doing our best to be prepared. We may still hope that the worst will never come, but we do feel that it is essential that youth and energy should remain at our disposal, welded with age and experience, so far as the imperative needs of the armed forces can allow.

One further duty is imperative for us all—that is to maintain a smiling face and a cheerful disposition towards all around us. We are sorry, therefore, that our correspondent should have taken to task the writer of our last Guy's letter for an obvious attempt at levity. We cannot believe that our readers could have supposed that we advocated the meting out to our enemies of hospital treatment in any way inferior to that

which we should give our own wounded. It is rather, we hope, our pride that we should continue to maintain our service to all and sundry, for all that rumour has it that the Red Cross ambulances themselves have been stripped of their crosses for the sake of greater safety.

SCARCITY of paper has become an acute problem in this country, and the recent Government restrictions make it necessary for us to cut down the *Gazette* to a minimum size; alternatively, publication may have to be restricted to a monthly issue. We feel that the *Gazette* supplies a definite need to our readers; besides providing a link for all past and present members of the Hospital, its continuance has, we believe, both a sentimental and an educational value. In days of national emergency, sentiment is little excuse for continued publication, and we must appeal, therefore, to all who have the opportunity to enable us to maintain the educational value of our journal. We are very grateful to those who allow us to reprint the manuscripts of their clinical lectures, but we have still a great need for articles on medical topics which will be of value to student and post-graduate alike.

THROUGHOUT its present campaign of warfare, one cannot help feeling impressed by the thoroughness of the enemy's organisation. A large amount of their success may be attributed to betrayal of the attacked countries by the so-called Fifth Columnists. These individuals, operating behind a cloak of confidence and goodwill, insidiously and obliquely insinuate themselves among the honest and patriotic members of our society and thereby extract from them important details and clues of our programme. If there were evidence of the existence of this sort of activity at Guy's, it would be very wise if all information relating to it were put in the hands of the authorities.

"America Revisited"

By W. H. Ogilvie, Esq., M.Ch.

Monday, October 3rd, 1938

IN common with everybody else I had felt certain that we should be at war on October 1st, and, though I had kept my reservation on the boat, I had no expectation of being able to use it and had made no preparations. Purchases and packing were left to Friday afternoon and I came without several essentials, such as dress studs and many addresses in America. My departure on Saturday was in every way a contrast from that in the *Daisy Bell* a year ago. I was going to America as an expected guest instead of a stranger, to a country I knew something about, in a palatial liner instead of a tramp, sailing from known waters and by day instead of night. The greatest contrast was in the boat itself and its crew. In place of the untidy freighter with its unclean matey stewards and spitting hoboes on deck, the *Empress of Britain* towered up dazzlingly white, and rows of uniformed attendants were lined up on the platform only too anxious to help and doing everything efficiently.

The spaciousness of the accommodation is amazing. My cabin is equal in size to the whole accommodation of the ordinary 20-tonner, and could easily be arranged to cook, feed and sleep six. The whole promenade deck is taken up with reception rooms of various sorts, and, in the fashion of the *Queen Mary*, each has been given over to some expert to design and decorate. It is interesting to find that the comparatively unknown ship's architects' work was more of a success than that of the famous artists. In addition there is a fine swimming pool with gymnasium and turkish baths, a squash court below decks, and a full-size tennis court and a golf practice net as well as all the usual deck games above.

We cast off dead punctually at 1 p.m. I was fascinated as usual by the departure: three tugs pulling the stern out, and two pulling the bow first out and then down, turning her in what seemed entirely inadequate space, and it was not a simple turn, for they had to take her about two lengths obliquely downwards to get sufficient room. Once this was over I went below for lunch, so as to be up in time to see the departure. When I came on deck, I provided a remarkable example of the ability of the human mind to follow one wrong assumption by an endless chain of faulty observations. On all our trips in the Solent in *Mary Anne* and *Taeping* I have watched the big liners come eastward through the Spithead forts

and out round the Nab, and twice have seen the *Empress of Britain* take this course. So when I came on deck and saw that we were going down a fairly narrow channel with wooded hills on the left and low ground on the right, and that the land on the left was not Lee or Portsmouth nor that on the right Cowes or Ryde, further that the channel ahead was neither wide nor had forts, I assumed that we were still in Southampton water. It did not matter that there was no Netley Hospital and no Hamble River; Hurst Castle did very well for Calshot seaplane base and the Shingles for the Knoll; it was only when we had slowed down and I saw the Needles and the pilot boat abreast at the other side that I realised we had gone out by the western channel.

We crossed the channel quickly and comfortably and reached Cherbourg about 6 p.m.; the greater part of the entrance was closed by a submarine net. A large tender came out and made an incredibly poor job of making fast and not too good a one of transferring cargo, so it was after dinner and quite dark before we set off on the journey.

Sunday we had a fairly strong headwind and biggish seas. They would have upset the *Daisy Bell* badly but only shook this ship enough to upset the squeamish; among them were the two key men of the day. One was the Padre, who was to take a thanksgiving service in the morning, and the other was Jack Doyle, who was going to sing at the evening concert. Both events came off, however, and as the first had a captain with a good voice and tuneful hymns, and the second a first-class orchestra, we missed little.

To-day has been really bad. I do not suppose we shall get the official strength of the wind, but I should say it was very likely force 10 or 11. The waves are enormous, many breaking right over the decks, which I do not imagine they often do in the mid-Atlantic. We have slowed right down, but even so the boat is pitching so badly that the whole forefoot occasionally comes out of the water and slams down with a crash that feels as if it must buckle the plates. Then the bow dips and a great roller looms above it to a height of at least 50 feet. One or two have crashed on the foredeck and we swirled about in water nearly waist high, with gratings floating on the surface and crashing into the bulkheads before the water finally drained away through the scuppers.

Wednesday, October 5th

For the next two days the seas were pretty huge, the boat was slowed up considerably with half the passengers permanently in their cabins, sports deck unusable and the swimming-bath empty. Ping-pong, driving golf balls, and walking round the deck were the only way to pass the day. I have had a word with the only two famous passengers on the boat—Lord Tweedsmuir and Jack Doyle; the first was charming and friendly, the second displayed chiefly feminine interests.

On Wednesday the weather was more settled, the bath was filled during the afternoon, and in the evening, after a gala dinner, there was a dance. I got to know quite a large number of passengers during the evening, and had some idea how pleasant the journey might have been if the weather had been better. A couple at my table were relating to me their medical experiences in London, which shed rather a lurid light on medicine as seen by the casual visitor. They had called in the hotel doctor, apparently a young man of great charm, and he had discovered all sorts of ailments in both of them and directed them to the leading specialist; the list was a " Who's Who " of London dichotomists.

Thursday was spent going down the gulf of the St. Lawrence, a wide expanse of smooth water with land visible only at some distance to the north. Deck games went on through the day, but the mateyness of a ship's company was already congealing with the appearance of the land, and the deck was increasingly restricted by the heavy luggage being brought up from below.

The ship carries two doctors, one a man who used to play for Bart.'s when Thomas was their star three-quarter and Albertyn ours, and the other a young George's man. I paid a visit to the hospital below, a most efficient little unit in the stillest part of the ship, with several wards, operating theatre, and X-ray plant.

On Friday morning we rose early, and came out to find the *Empress* nosing her way into Quebec, a wintry sun shining on the Plains of Abraham and lighting up the old town and the towering granaries and warehouses near by. The surface of the river was covered with little woolly balls of mist, and a big ketch was drifting downstream. The worries of passport, packing and tips made a leisurely appreciation of the view impossible.

After clearing the Customs and ringing Harris at Toronto, I took a taxi up to the Chateau Frontenac and got in touch with Stephenson. Like all surgeons in this continent he was not merely ready but apparently delighted to chuck all his hospital and private work at a moment's notice and give up the whole day to entertaining a complete stranger. He was a wonderful host and guide. The morning was spent in a tour of Quebec and its immediate surroundings in his car. The town is a real old French town, scrambling up the steep sides of the north bank of the St. Lawrence and still keeping the narrow streets

arranged haphazard, and many of the old houses. The steep streets are paved with cobbles, are usually very narrow, and take continual right-angle bends to avoid a house or dodge a gradient. Cars, to get up them, have to get in a low gear and keep their revs. up, so that when they come rushing round curves with American dash, to which is added the force of necessity and a touch of Gallic abandon, the result is nerve-wracking to a passenger. Many of the old houses are most attractive, and the Hotel Dieu and the house in which Montcalm lived during the siege are hardly touched. The Plains of Abraham and the old forts are all made into a park, and the Garrison Club, in which we lunched, is part of the old barracks in the fortifications.

After lunch, Stephenson took me for a drive along the St. Lawrence, and over a suspension bridge to the Isle of Orleans, which is untouched Canadian-French in population, in buildings, and in methods of agriculture. The fields are all used in a strict system of rotation, and ploughing is done largely with oxen. The houses are straggled along the road at irregular intervals, none dotted about the landscape, for the original settlers, as they came to divide the land among their children, would give each a slice whose borders were at right angles to the road. In this way the family remained together for protection and intercourse in winter, when the country was impassable. The houses were stone, with boards over the end where the winter storms came, to keep the mortar from being blown out. One house, now kept as a show, has all the dents where Wolff's cannon-balls bounced off, still showing in its walls. The countryside was a blaze of colour, for the maple tree after a touch of frost takes on scarlets and oranges of incredible brilliance.

As we drove round, Stephenson talked about the problem of race in Canada, which I had heard discussed in Toronto last year, and at which I had a glimpse in Montreal. In Toronto I heard the Scottish, Imperial side, in Montreal the difficulties, were the French side. Stephenson is Canadian-born, of Scottish strain on his father's side and French on his mother's, and his views are as open as one is likely to find. He seems to envisage a gradual absorption of the Anglo-Saxon by the French in process of time, but what he says and thinks applies, of course, very much to the eastern and northern parts. In parts of the West and the industrial middle the problem is the Southern-European blood that taints rather than reinforces any stock with which it mingles.

The French Canadians are very much a nation of single breed, the original settlers of this part of the North American continent, bound together by ties of tradition, family, religion, and an intense patriotism of their own. Reference to "the Motherland," meaning England, is to them meaningless. They are French but not of France, for they are of almost pure Breton and Norman ancestry, that is Nordic rather than Latin, and biologically far closer to the Briton than to the Parisian. The French immigrant from the south is to them a "dumb Frenchman." They trace their families to original settlers, and are jealous of their origin. They are catholics, but of an intensely Puritan type, observing the Sabbath with the strictness of a Highlander. They are above all Canadians, and rooted to the land they settled. After Wolff's conquest they were in the forefront of those who defended Canada against the Americans.

The French and English doctors have hardly any contact, each having their own hospitals and their own societies. The French doctors belong to one with the dreadful title of "Société des Medicins parlant la langue Francaise de l'Amerique du Nord," an association that includes French-speaking doctors in the States. They go to the Sorbonne for their degrees, to Paris for post-graduate study, and get surgeons over from France to address them. With all this they are above all Canadians. In the Garrison Club the English and French, though on good terms, have separate smoking-rooms. Every effort is being made to get the French to take part in the Canadian Medical Association, and to support the Fellowship of the Royal Canadian College of Surgeons, and that of the American College, but so far with little success.

(To be continued.)

Guy's Hospital Gazette

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The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Mr. Beale

IN his thirty-eight years at Guy's Hospital Mr. Beale has in no little way contributed to its efficient administration. He first started under Dr. Perry (later Sir Cooper Perry), and has been with us ever since. When he first began here, there were only three females on the administrative staff, and he has had to watch that number gradually grow to forty.

The number of amusing stories he can tell about members of Guy's staff is legion. Many people regarded Mr. Jacobson as gruff and difficult, he showed Mr. Beale his receipted rent-book first.

Another amusing incident involved Dr. Beddard. Bell, the post-mortem man, was preparing the day's list when he was asked about the number. The reply was, " Thirteen, Sir." Dr. Beddard exclaimed: " Good God, who's been going round the wards? " Bell, with a merry twinkle in his eye, solemnly replied, " You, Sir ! "

Mr. Beale's day is crammed full of interesting experiences, but the enormous amount of detail

but behind his cold exterior he hid a kindly heart. One day Dr. Perry refused his request to supply a patient champagne. The next day he produced two large bottles of champagne from his tailcoat pockets and said: " My patient shall have champagne." He once set up a patient, whose leg he had amputated, with a fruit and vegetable stall, and used to send him 10*s*. per week provided with which he has to cope can only be approached by the calmness and sense of humour which he possesses. Perhaps it is incidents like the following that help him maintain these qualities. One day an old lady came into the Office about the burial of a patient, and said: " You see, I ain't exactly married to him, but I've lived with him for forty years ! "

Sector News

Guy's Letter

THE war scene moves about the face of Europe like an uncontrollable fire fanned by a crazy wind. Its speed and extent have taught us the futility of sclerotic organisation based upon preconceived speculation and antiquated experience. If we are to have ultimate success, it will depend upon our ability to develop an elastic system of things that can rapidly and adequately mould itself to circumstance. This has been the principle followed at Guy's, and we

now stand prepared for every kind of medical eventuality that may occur.

A tournament match between residents and students heralded the opening of the new squash courts. Victory went to the residents; this was followed by a pleasant meeting in the "George," during which a more favourable fluid balance was established among the combatants of a few hours before.

One cannot help feeling that the high standard of Guy's teaching depended upon the close association between staff and students. It was by this means that the Guy's tradition was built up and its world-wide reputation for sound medical contributions established. Now, however, this bedside system, whereby the student inhabited and consolidated his medical knowledge by experience, is in danger of being replaced by more remote methods which promise to make him an armchair expert. There are no short cuts in the study of medicine, and we must not use the war as an excuse to sink into careless and slovenly habits.

B. L.

Pembury Letter

SECTOR 10 may well be described as a triangle with Guy's as an advanced casualty clearing station at the apex, and Pembury on the base line. One visualised bomb-scarred London evacuating its maimed and wounded down to us in the country, but recent events has raised the possibility of the whole process being reversed! Kent is no longer a health resort, and the first bombs to be dropped in the south of England were sufficiently close to Pembury to make us all very much aware of their presence.

At this stage we are pleased to announce that our huts are nearing completion, and should soon be occupied. In design these huts are very similar to those at Farnborough and Orpington, but we do claim that ours are pleasanter to gaze upon. The green tiled roofs and grey-painted walls look very attractive. Inside the provision of bathrooms, kitchen, sluice, etc., is, we imagine, quite adequate, and from the nursing point of view they should function efficiently. No definite opinion can be given until they are in working order. We feel that local theatre accommodation should be provided, as well as a self-contained X-ray unit, but we will with-hold further comment until we have seen how the system works under full pressure.

In the near future the Guy's nurses will move from their mansion at Southborough to newly erected huts at Pembury. We have, of course, inspected their new quarters, and they are quite pleasant. One feature struck us, and that is that the wardrobes must have been imported from Lilliput.

In our last letter we commented on some of the equipment at Pembury. Since then we have learned that there is more than one sphygmomanometer, but it seems that the Maternity Department has "taking ways," and this accounts for our misconception!

N. M. J.

Orpington Letter

ONCE again I find myself taking up the pen to record some of the happenings at Orpington during the past fortnight. I fear that we have no really exciting events to relate, but life has never had a dull moment and minor incidents keep cropping up that make us wonder whether or not medical officers in E.M.S. hospitals should be encyclopædic in their knowledge.

During the past week we have noticed the arrival of the Military Police, whose sole duty seems to be to direct traffic at the entrance. However, their traffic direction occasionally leaves something to be desired, as we have found from experience.

We are inundated with offers from the local people to entertain our military patients. They are asked to go to teas and picnics, and to use people's gardens; Major Philpott, our Military Registrar, seems to spend a good deal of his time gently informing people that we are very grateful and will take advantage of these offers when our next convoy arrives. We regret to say that when he has kindly but firmly informed the would-be hostesses that their hospitality is not needed at the moment, many have shown signs of weeping on his ample bosom. In point of fact our number of military patients is rapidly decreasing, and we now have little more than half the original number.

This week we have had no changes in personnel among the house officers, but our senior nursing staff keeps varying. Sister Hilda Gration has been transferred from Pembury, and I am sure the nurses will welcome one so universally liked and capable.

Sister Gale has come to us from Farnborough and is in charge of Fagge Ward in the new block, which has been set aside for special orthopædic cases. We also welcome Sister Griffith, Sister Reeves and Sister King, who have all been transferred from Guy's.

R. A. J.

This Medicine

Doctor (to mother whose daughter he is examining).—" Hasn't she had any treatment for this (impetigo of long standing) before ? "

Mother.—" Oh, yes, Sir ! I took 'er to the Cottage 'Orspital, where they ultra-violated her, and she doesn't seem to be the same girl since."

Answer by candidate in General Medicine paper.—" Vitamin K. Found in intestines in alpha alpha grass. It causes post-mortum hæmorrhage."

" Classically, a wasp inserts its sting into the tongue of a holiday-maker who is quaffing ginger-beer from a bottle which has been left open."—(*From Bailey and Love on Acute Parenchymatous Glossitis*, p. 135.)

Extract from Daily Routine Orders.—" The attention of Medical Officers is drawn to the excessive amount of water which is being used for flushing drains at a large number of stations on their instructions, and the increased expense to the public necessitated by additional pumping. For the future all water used for this purpose must be metered and pass through the Accounting Officer."

The prize for this issue is awarded to Wing-Comdr. H. M. Stanley Turner, M.D.

Review

Medical Diseases of War. By Sir Arthur Hurst, M.A., D.M. (Oxon.), F.R.C.P., Lieutenant-Colonel, late R.A.M.C. ; Consulting Physician to Guy's Hospital, and late Officer Commanding Seale Hayne Hospital for Functional Nervous Disorders ; Member of Medical Advisory Committee, Mediterranean Expeditionary Force, and Consulting Physician to the Salonica Army, with the co-operation of H. W. Barber, M.A., M.B. (Cantab.), F.R.C.P., Physician-in-Charge of the Skin Department, Guy's Hospital; F. A. Knott, M.D. (Lond.), M.R.C.P., Bacteriologist to Guy's Hospital, and F. A. Ross, M.D. (Edin.), F.R.C.P., late Medical Director of Cassel Hospital for Functional Nervous Disorders. Published by Messrs. Edward Arnold & Co., London, 1940. Pp. 327, with Four Plates and 32 Figures in the Text. *Price* 16*s*.

I NEVER knew Trench Fever except as P.U.O., but Sir Arthur's chapter on it must be read with reverence by all Guy's men, for it recounts how it was first sorted out by the much-beloved Dr. G. H. Hunt, who would, to-day, be our Senior Physician were it not for his sad and early death. In his notes on diagnosis Sir Arthur does not mention sand-fly fever, which seems to resemble it except that it leaves the patient more prostrate for a short time and does not relapse.

With Sir Arthur Hurst it is not that one disagrees with him, but that he compels you to be disputatious, and so it is with typhoid and with dysentery. The criticisms that I make upon this part of his book are levelled at Sir Arthur only because he had been a leader in the teaching of medicine between the wars, and because teachers have in that time neglected the preventive approach of medicine, and not only have neglected it but have obstructed its teaching by saying that further instruction was unnecessary because they introduced the preventive aspect into their own teaching and then entirely failed to do so. The result is that we are not sending out into the world men who think in terms of prevention as well, and as much, as in terms of diagnosis and treatment. Typhoid is not a disease of war ; in fact, a comparison of the last war with the last twenty years shows, from the Bournemouth and Croydon epidemics, that to-day it is less a disease of war than of peace. The point about typhoid is that its prevention is different in war and in peace. In peace it is a question of control of water supplies, a matter for the engineer and the bacteriologist. In war-time it is a question of inoculation and of camp sanitation. Sir Arthur has but little or nothing to say about these. When he mentions inoculation it is to discuss its relation to antigens as a diagnostic value. When he discusses prophylaxis he mentions the water supply, and I doubt whether this is of any special importance in war. He talks about recognising cases as early as possible, which you cannot do in a front-line trench. You just find a fellow ill and send him down the line. He does not mention flies, and they are as important in the spread of typhoid as of dysentery, and he speaks of immunising all who may be exposed to infection. Everyone ought to be inoculated. The only prevention against typhoid is a monthly return of 100 per cent. in every unit. When you have a near approach to

that typhoid disappears from your anxieties. But the work of attaining it is strenuous and constant. You have first to attain it, then to retain it by assuring yourself that every draft is the same. Then you had to maintain it by re-inoculation every eighteen months. With a battalion of a thousand men this means two inoculation a day, and when the days of moving, fighting and marching are considered, a big batch soon mounts up that will result in a half-day's work for the M.O. In addition, the entry in the paybooks must be meticulous, but, in addition, the M.O. must keep his own record in order to hunt out all those oddments who are so hard to get hold of, like the cooks, the C.O.'s orderly, or the sergeant in charge of transport, each of whom will try to dodge it. Then there is that difficult person the conscientious objector. He should be told that while you must respect his conscience he must respect yours, who are as conscientious an inoculator. He is then in a position to understand you when you say that you cannot conscientiously allow him to mingle with his colleagues, but must find him a job where he cannot be exposed to the accusation of trying to avoid danger by his conscience, but where he will not add to the danger to which his fellows are already exposed. In this war to guard an ammunition dump exposed to aerial attack would exactly fill the bill. Any medical officer who allows an entry to be made in a man's paybook to the effect that he has inoculated him when, in fact, he has not done so should be cashiered for conduct unbecoming to an officer and a gentleman, and then struck off the rolls for conduct of an infamous character in professional conduct.

Sir Arthur Hurst's chapter may be an excellent short description of typhoid and paratyphoid as diseases. Of that I am unable to speak, having become a surgeon because typhoid was too hard for me. It is not a description of typhoid as a medical disease of war. No better evidence than this of typhoid inoculation can be cited in support of the case for the better education of the student in clinical medicine from a preventive approach in all his thoughts, words and deeds, instead of keeping it in a separate mental pocket labelled Public Health. The whole profession of my age was in the last war; with the majority of us inoculation was an important part of the day's work; there can have been but few to whom it did not come sometimes, and the success of our efforts was such that we enabled the war to be prolonged beyond the second year. There is no doubt about that. If preventive inoculations had not come in between 1900 and 1914 we should have had sickness rates comparable to those in South Africa, and neither side could have maintained its man-power in the conditions of life in the line in France for more than two years. And then, when we got back into civil life, we doctors, as a profession, forgot to apply for the good of humanity in peace what we had learnt to use for the prolongation of evil. I do not mean that typhoid in this country is so important that we should attempt preventive inoculation for the population. The inertia of the many, and the opposition of the few, would make any such thing abortive even if it were advisable; and I could not again advocate compulsory inoculation by law against any disease. But both the Bournemouth and the Croydon epidemics might have been limited and fewer lives lost if extensive voluntary inoculation had been advocated and pushed in each of these areas by every doctor in the place. Great criticism was thrown upon the public authorities; the profession as a whole cannot escape blame for a want of leadership. If, as a profession, we are to rise above a mere commercial standard, we must be prepared to act as leaders, nationally and locally, when emergencies such as these arise.

But if preventive typhoid inoculation holds but a small part in the life of the nation while at home, thereis no doubt that no one should leave this country without being inoculated against typhoid. To what extent have the men who were in the last war, or the men and women who were taught by them, used their influence to get this carried out? Thousands of patients must have chatted with their doctor about the coming holiday. How often has he said: "I think you had better let me protect you against typhoid before you go." Hundreds of doctors must have advised or approved Continental trips or cruises for convalescence. How often have they made it clear that their advice is dependent upon the patient being protected from preventable disease that is unlikely to affect them in this country. How many doctors have kept up their inoculation, or introduced it into their families? To do so makes the holiday happier. With a family in one of the further watering-places of Brittany one might drop into the little port of St. Briellc and, going round the local hospital, find it divided into the general and infectious wings. To the Religieuse that took you round infectious and typhoid were practically synonymous, and there was a young lady from Paris recovering from the disease. It made one understand the conversations at the hotel among the Paris visitors. They must not drink the hotel water, but always wine! wine! wine! and for the children the insipid distilled water from which the local chemist reaped his summer harvest. In the Canaries Islands it was the same.

At Las Palmas it was generally recognised in the hotel that each new batch of English tourists must go through an attack of "Canary Island Tummy" before becoming acclimatised, and in doing so lose two or three days of the fortnight's stay. And yet a protected party went all over the islands to the furthest village of Agaete in the Gran Canaria and the furthest island of Palma without any suspicion of trouble. It is possible that efficient T.A.B. inoculation protects against allied organs which give rise to less severe symptoms. How many lives have been lost in this way I do not know; but that valuable lives have been lost or threatened we do. Mr. Arnold Bennett was cut off at the height of his powers, while our new Prime Minister nearly lost his life. This in itself is sufficient reason for the emphasis that I have laid upon this principle of educating the medical profession to think subconsciously in terms of prevention.

I cannot understand why Sir Arthur has limited the chapter on Dysentery to the bacillary type, only giving an occasional passing reference to the amœbic form. If this book is to be of use to men in the general hospitals, they will want to know how to treat cases of amœbic dysentery as well as bacillary, even though they see fewer of them. There are no two disease so alike in symptomatology and needing such different treatment, and with each the treatment is one which must be laid down as a working scheme and then varied almost daily according to the condition of the patient. A good Ward Sister, with a bit of experience, will make up for many deficiencies in a textbook.

I believe that practically the whole of the E.E.F. was infected with Shiga and Flexner. Two experiences lead me to this conclusion. A certain number of abscesses of the buttock were occurring in men who had had intra-muscular injections of quinine, and surgical specialists, who had never left the base, wanted an order to be sent out that M.O.'s in charge of battalions should be prohibited from giving quinine by this method, on the ground that they could not give it aseptically. My opinion was asked as being one who had had some experience of the forward area. I said that M.O.'s were quite capable of sterilising a syringe, but even if they were not it was much better for a few quinine abscesses to get through to the base than for a large number of men to die in the field ambulances and casualty clearing stations from cerebral malaria. Being then O. in C. Surg. Div. of a general hospital at Alexandria, I went into the matter. I made the incision through the skin, laid down that knife, and then put a needle through the gluteal fat and drew off pus for cultivation from the abscess before I opened. In this way I got Shiga and/or Flexner every time. One only got the staphylococcus when the needle was put through the skin, or when the cultivation was not taken till the pus had flowed over it.

My other experience was from the terrible influenza epidemic of the end of 1918 and beginning of 1919. The lungs of the men that died from it gave the same appearance as those that died over here, and that one has seen from time to time since. An acute bronchiolitis with every tube full of fluid that poured out of the lung when you squeezed it. Yet the report that we most often got from the bacteriologist was: "A gram-negative bacillus morphologically identical with Shiga and Flexner." Everyone was too busy to go into the matter in greater detail, but there was little doubt that out there the common secondary organism in the lungs of men dying of influenza was a dysentery bacillus.

There are three other diseases which are just as much medical diseases of war as are typhoid and dysentery, and it is a pity Sir Arthur did not give a chapter to each or between them. They are cholera, typhus, and malaria. Malaria is so protean a disease that with my small esperience I have seen it imitate every acute disease except osteo-myelitis and pregnancy, and the only reason why I have not seen it imitate the latter is that I have only seen the disease in men. Anyone who begins to write upon its prevention, diagnosis or treatment will at once fill pages. A little experience makes you think you know all about it; a little more makes you realise you do not. I suspect that with a great experience of it you feel you know nothing about it.

I do not think cholera appeared in the last war, and I did not see much typhus, but they are both such devastating diseases that they need mention. Cholera was protected by inoculation. This has to be repeated every three months. To keep this up in a battalion of infantry is very hard work for the M.O. It means an average of twelve a day, and if you are on the move for a week there are nearly a hundred to be done. I have heard of doctors who had nothing to do in the last war; they were not M.O.'s in charge of battalions constantly on the move with cholera inoculations to be kept up to date.

We had two scares—one in Salonica of a single case, another in Jerusalem of a sudden epidemic of diarrhœa in our own field ambulance. They were both due to food-poisoning. This brings up a point on which guidance would be of value—the treatment of diarrhœa. My own belief is that a dose of castor oil at the first possible moment is the best. If blood and mucus are seen in the stool it would be inadvisable. If the diarrhœa had

been going on for long it might be. I doubt whether it harms a potential dysentery in the early stages, and it certainly clears up diarrhœa. It may save the life of a person with food-poisoning if taken at once. I have often wondered whether all of us might have known Wooldridge had he taken a dose of castor oil instead of coming up to Guy's and doing a round in Clinical on the morning of the fatal day.

Tetanus is a terrible disease, perhaps the most terrible of all except hydrophobia. My business was to see that A.T.T. was given to every wounded man, even if it were only a small scratch. In the advance across the desert from the Canal to the Wady Ghuzee it was not given. That was the true desert consisting of sand. We who joined the E.E.F. in the Wady Ghuzee never really knew the desert. What we called desert was that which divides it from the town. But, coming from France, we determined to carry anti-tetanic serum. We argued that we were going on to plains that had been cultivated longer than had Belgium. I was glad of this decision when we reached Jerusalem for I was put in charge of the hospital for tetanus that the Turks had left behind. There were about forty of them, in all stages of the disease. It was a terrible sight, but I remember very little of it—there was so much to do, and new impressions were crowding in so fast upon the brain. But of one case I have a vivid memory. It was a man with a stiff shoulder, in hospital at Cairo, and it was a question as to whether it was an hysterical manifestation. Under an anæsthetic the joint became quite free, and the man was labelled neurotic. In four days he was dead of tetanus, and the organisms were found in the bottle of quinine from which he had had an intra-muscular injection into that deltoid muscle. Ever since then I have been advocating that a sample of every batch of drugs made up for injection, therapeutic or anæsthetic, should be sent for a bacteriological examination for aerobes and anaerobes, but so far as I know, as yet without success. Perhaps it will need another tragedy within the range of the coroner's court to get this entered in the Pharmacopœia. I find this one of Sir Arthur's best chapters, especially because of the early symptoms, and should like to have it at hand were I to go through such experiences again.

I did not come across the war nephritis that Sir Arthur describes, but had a small, interesting experience that I have not found others had. From December, 1916, to March, 1917, we were in Thessaly underneath Mount Olympus. For most of the time the air was crystal clear, and the snow-covered home of Zeus sparkled in the sunlight or the moonshine. In the morning there were two inches of ice in the bucket in my double-walled tent. At mid-day I was riding my horse with my tunic strapped to my saddle. The men were in bivouacs on a hill-side and were never fitter; lousiness was our only problem. Then the sun went in, the mountain veiled itself in mist, and we did not see its summit for a month. It was much warmer at night, no ice formed; but by day it was wet and depressing. The camps became water-logged. Thanks to skilled and efficient trenching devised by my sergeant-major, a Canadian, my own was the only one that did not have to be moved. The trenching was devised to divert the water that ran down the hillside, so that the men had only to deal with that which fell upon the camp itself. During this time we had many cases of bloody urine. Whether it was a nephritis and, if so, of what type I cannot say. The men had to go down the line. But that it was associated with damp I have no doubt. The clouds rolled away. The top of the mountain appeared again. The sun and the moon that we had not seen for a month sparkled again in the clear atmosphere, and no more cases of hæmaturia occurred. Lousiness, again, was our only problem.

Other chapters are on Epidemic Jaundice, and on Gas-Poisoning. On these I cannot claim to speak from experience. Nor can I on the Soldier's Heart—much as I should like to dilate upon the wickedness of overloading that most patient beast of burden —the British Tommy. On Doctor Barber's chapter on Skin Diseases I will, if the Editor permits, me, write in another issue.

T. B. L.

Correspondence

State Aid and Clinical Research

To the Editor of the GAZETTE

SIR,—I am sorry to prolong the correspondence on this subject of what constitutes research, especially as it is in danger of becoming rather a childish argument, but I would like to correct the impressions that Dr. de Navasquez gives of my earlier letter. He states that I seem to deprecate the usefulness of a happy combination of ward and laboratory work and favour only a clinical approach. Such was certainly not my intention, and I am sorry that my letter was construed in this way. Perhaps it was my own fault for not writing clearly, but I did write "Professor Wright's 'happy combination of ward

and laboratory work' is clearly a desirable alliance."

I would not have it thought for a moment that I sponsor isolated clinical research; a proper combination of clinical and laboratory methods is desirable, and I am sure that research work produced by a team will be better in almost every way than that produced by a solitary worker. My object was merely to stress what I still believe is indeed well recognised, but which is in danger of becoming overlooked, that " it is still possible for an earnest and enthusiastic clinician to do valuable research work."

I simply do not believe that Dr. de Navasquez really means it when he writes that in mentioning Addison's and Bright's work I could not have chosen better examples of the limitations of clinical research! He himself says that " little was added to our knowledge of these two diseases during a hundred or more years." Not too bad for Addison and Bright and their inferior methods of research!

Surely Dr. Goodhart summarised the problem quite clearly in his excellent letter when he says: " Clinical research may be carried out in many places; amongst others in the ward, the library, the operating theatre and the laboratory; sometimes it may be confined to any one of these, but commonly it will require the use of several of them. The laboratory is merely a place where more precise observations can be made than can conveniently be carried out at the bedside or where some light may be shed by special investigation on points that must be left obscure by 'clinical' observation."

This is the crux of the whole argument.

When Richard Bright boiled albuminous urine in a tea-spoon held over a candle-flame he was carrying out a piece of " laboratory " research in no way different fundamentally from that of any present-day clinical chemist who performs a complicated blood-chemistry investigation in a fully equipped modern laboratory.

Let us have an end to this argument and agree that we all have a useful place in advancing our knowledge of disease and its treatment and that co-operation will benefit everyone, but let us definitely also have an end to the suggestion that the knowledge contributed by the clinic can never be equal in value or merit to that which comes from the laboratory, and that he whose chief activities lie in clinical medicine or surgery has renounced for ever the possibilities of doing research.

Yours, etc.,

R. C. BROCK.

Guy's Hospital,
S.E.1.

Orthopædic Surgery and Fractures

To the Editor of the GAZETTE

SIR,—I was greatly amused to read in your correspondence columns of May 18th an example of that modern form of entertainment—dictatorial propaganda. Mr. J. S. Batchelor takes to task your reviewer of Watson-Jones's treatise on fractures for the very conservative assertion that, " given the necessary training and interest, there can be no reason why a general surgeon should not conduct a Fracture Clinic as successfully as his orthopædic colleague." No doubt Mr. Batchelor would like to take under his " protection " the treatment of fractures, but, like other " unoffending neutrals," what have they done to deserve this " protection "? Have they so abused their " neutrality " as to fare well at the hands of the " belligerent " general surgeon? or is it that their country possesses " raw materials " vital to the " war needs " of the orthopœdic surgeon?

Following faithfully the lines laid down in *Mein Kampf* for successful propaganda, Mr. Batchelor produces a shrill harangue, full of inaccuracies (the bigger the better), interspersed with rude gibes, and which, when analysed, is a meaningless hash of previous utterances in no way proving the point at issue. Perhaps it was only meant for " home consumption "—but may I be permitted to criticise it?

Your readers are asked where a surgeon intending to treat fractures shall be trained. The self-evident answer to this question is: " In a properly conducted Fracture Department "—but why need the director of such a department be an orthopædic surgeon? That orthopædic experience is of great value to a surgeon practising general surgery is undisputed, but to suggest that all the problems and complications of fracture treatment are " based on well-established orthopædic principles " is fatuous. They are based upon the principles of general surgery, of which parent orthopædic surgery is a mere babe in arms. Did Hilton recognise the principles of reduction and immobilisation of a fracture? Were Pott, Colles, Bennett, Smith or Volkmann orthopædic surgeons? Was plaster of paris first used by an orthopædic surgeon, and is such a surgeon to-day the only one skilled in its application, or in the principles and use of skeletal traction?

A surgeon treating fractures should certainly be capable of dealing with every phase and complication of such treatment. The experienced general surgeon can do this, but what would happen to the

orthopædic surgeon presented with a ruptured bladder or urethra complicating a fractured pelvis, or with rupture of the liver, spleen or kidney complicating rib fractures, or with intracranial hæmorrhage complicating a fractured skull? What is the evidence that orthopædic surgeons are better teachers on the subject of fractures than interested general surgeons? Would Mr. Batchelor like seats on the Examining Boards for the special purpose of marking questions set on fractures?

It is greatly to be regretted that Mr. Batchelor has found it necessary to introduce the personal element into his argument. No one at Guy's has any doubt that in its Senior Orthopædic Surgeon the Hospital is particularly fortunate in possessing a man who has produced work of great value, not only on fractures, but on many other topics; a man who is always ready to discuss any problem with his colleagues or juniors; and a man whose attitude to the general surgeon treating fractures is so generous as to be the complete antithesis of Mr. Batchelor's.

It is unfortunate, Mr. Editor, that so long an epistle as this is necessary to prevent your readers being misled by unopposed propaganda. It is well known, however, that the methods available to combat modern "dictators" are clumsy. It is difficult to combat verbose propaganda with any other weapon than verbosity; every false suggestion must be countered and every implication denounced. In this latter respect Mr. Batchelor should note that, although in some instances general surgeons may have invited their orthopœdic colleagues to take over the treatment of fractures, there are "Quislings" in many ports ready to betray their country to its considerable detriment. There are also "patriots" who *do* realise the "magnitude" of their fracture problem and whose minds are *not* clouded in "obscurity" as Mr. Batchelor tries to gull his public to believe. However "ignorant" your readers may consider the reviewer in question, they will surely see through Mr. Batchelor's "distortion" of context which allows that accusation to be levelled.

Finally, Mr. Editor, you, in your illustrious chair, do not escape criticism for allowing such an "important work" to be reviewed by someone who is not "a specialist in that particular branch of surgery." How dare you, Sir, abuse the totalitarian privilege of orthopædic surgeons to have suppressed all adverse criticism of their "threatened invasion"? What is becoming of democracy when your readers are allowed to think for themselves and are supplied with reviews not "valuable" or "well-informed" in the eyes of the would-be "party leaders"? Yet is it conceivable, Mr. Editor, that you did not err so gravely; that your reviewer has some little experience in the treatment of fractures, and that similar and greater experience in countless other general surgeons may be a source of discomfort to specialists with grandiose ideas like Mr. Batchelor?

Yours, etc.,

S. H. WASS.

Guy's Hospital,
S.E.1.

Guy's of Forty Years Ago

To the Editor of the GAZETTE

SIR,—I was at Guy's in Colonel Keate's time, and his reminiscences set many chords of memory vibrating.

Those "take-in" suppers were gargantuan affairs. I still have a record, which may be interesting to present-day Guy's men. The two dressers for the week footed the bill, and my own share for the week came to £10 2*s*. 8*d*. Among other items consumed during the take-in were 42 gallons of beer, 1½ dozen of whisky (the cost of living in those days was 3*s*. 6*d*. per bottle), two rounds of beef, two hams, a seven-pound jar of pickled walnuts, ditto of piccalilli, six large boxes of "starters" (figs), 8 lbs. of butter, innumerable boxes of "whales" (sardines) to the value of 17*s*. 6*d*., with white and brown bread "in proporcioun," averaging about four large loaves per day. The above takes no account of supplementary supplies of various items obtained during the week as they ran short.

The powers that be had made remarks about the quantity of beer consumed in the "rooms." We used to get the beer from the "Ship and Shovel," and I remember that we got in two extra nine-gallon barrels surreptitiously by manhandling them over the wall in Maze Pond and taking them in by the back way. I suppose the custom of different firms varied, but we (Sir Henry Howse's firm) never gave policemen a "glass" of beer. We used to fill the "tripod," as the "three-handled pewter tankard" mentioned by Colonel Keates was called. This held about three pints and was a rowing trophy won by a Guy's boat, with the names of the crew engraved on the side. I wonder whether it is still preserved with the other Hospital trophies? As Colonel Keates states, it was not an uncommon thing for accident cases to be brought "from the neighbourhood of Bart.'s all the way to Guy's"—usually by policemen possessing a high co-efficient of absorption.

There was one in particular we used to call "Baby," who was about 6 ft. 3 ins. and weighed about 20 stone. He could empty the "tripod."

It was also my privilege to dress for "Dear Old Pom" as Assistant Surgeon's dresser. During my time with him he "gave" me many operations, including two hernias, a Symes' amputation, an amputation "at the seat of election," amputation of the breast for chronic abscess, psoas abscess and piles. Later, he asked me to ligature his own radial artery for a septic wound of the palm with secondary hæmorrhage, and sent his wife, still happily alive, to me as a patient.

I remember one night in the course of a "cat hunt," getting through a small hole underneath Clinical into an extensive unused cellar, which ran the length of the whole building. When I struck a match—we had no torches in those days—I got the shock of my life, for the cellar contained many life-size models, many of them unfinished, made by Joseph Towne, who made the wax models in the museum. I wonder what became of them when the building was demolished?

One could "reminisce" indefinitely, but we old fogeys must remember that, however we ourselves may enjoy the process, too much of it may bore the younger generation, some of whom may recall my little contribution to the Jubilee Number of the *Gazette*.

Yours, etc.,
"STANLEY."

The Hippocratic Oath

To the Editor of the GAZETTE

SIR,—It is but little that we who have to stay at home can do to help our cause at this time, but one of the things we can do is to be careful not only of what we say, but how we say it. Your correspondent who writes the Guy's Letter in the Sector News states: "Should any parachutist be foolhardy enough to alight in the Borough High Street, we trust we shall be absolved from the Hippocratic oath as we deal with what remains are brought into our Surgery." That part of the Hippocratic oath to which he must refer reads as follows (Loeb Classics Transactions): "I will use treatment to help the sick according to my ability and judgment, but never with a view to injury and wrong-doing." We may note the "and." The next two sentences show that the "wrong-doing" refers to some motive behind the action, for they refer to poisoning and abortion.

What can your correspondent possibly mean by this? Let us suppose his hypothetical parachutist in descending into the High Street has hit the coping of a building and sustained a fracture of the humerus, and is brought into the Front Surgery when your correspondent is on duty. Is he going to refrain from giving any treatment? Is he intentionally going to produce unnecessary pain while putting up the arm? or is he going to try so to set the bone that the radial nerve becomes involved in callus so that a permanent impairment of function results? Lastly, to what does that word "remains" refer? Does he propose to injure some other part of his captive's body, and to imitate the Red Indian with his tomahawk? From the context we learn that this "wrong-doing" from which he hopes to be absolved is a desire to get his own back on the Fuehrer because his Whitsun week-end was spoilt.

It is quite certain that he would do none of these things, nor would he be allowed to by his fellows in the Surgery. What then is the importance of his writing? It is the influence that it may have upon the mind of the nation. There are among us some who are saying that the only way to teach Germans is for us spontaneously to be as brutal to them as they, under orders, are to us and to our allies. These persons are not numerous. They are not, at present, important. But their number is growing, and as fear and hate develop they will become more. They are in direct opposition to the Government, and to the nation which entered this war under the obligation not to do such things.

Everyone who writes as your correspondent does makes them think that he is with them and, unless controverted, makes them more bold. An analysis of a sentence or two, such as I have attempted above, will usually cure this psychological disturbance of loose writing, but the condition is very likely to recur unless the patient is strongly co-operative, and for this reason I would suggest that you change your Guy's correspondent for the Sector News. It is his function to tell those away from Guy's what we at Guy's are doing. It is not his business to air views. If he expresses opinions they should be the opinions of a representative majority. That our students as a whole do not subscribe to what he wrote I know to a certainty.

Yours, etc.,

T. B. LAYTON.

Guy's Hospital,
S.E.1.

Sport and Hospital Information, etc.

Cricket

GUY'S *v.* PRIVATE BANKS

THE Hospital opened their cricket season with their annual game against the Private Banks at Catford Bridge on Saturday, May 4th.

The first eleven was depleted by the loss of six of last year's batsmen, but we welcomed the first appearance of C. B. Clarke and J. D. Whitehouse in the side; these two players should go a long way to make up for our losses.

Our opponents won the toss and elected to bat on a wicket which was very soft and of little assistance to the bowlers. Skea opened our attack and in his third over Hurst held a very fine catch to dismiss one of the opening batsmen. Robertson, however, from the moment he came to the wicket batted superbly and hit the loose ball hard; he was particularly severe on Clarke, who was unable to turn the ball quick enough on the soft pitch. While Robertson batted well at one end the other batsmen, with the exception of Gunn, offered little resistance to Skea and Clarke, who both bowled consistently well.

Coffey relieved Skea, who bowled 11 overs at a cost of 33 runs, and finished off the innings by taking the last two wickets. The fielding was of a good standard and mention must be made of Hurst's two fine catches at first slip.

Hurst and Chase opened our innings after the tea interval, and we had the misfortune to lose Hurst in the second over. Thomas joined Chase, and the latter proceeded to take on the role of Robertson in our opponent's innings, showing a disrespect for the bowling which our later batsmen failed to appreciate.

With the score at 50 for one wicket we were well on top of the game, but soon after this Thomas was bowled. This was a signal for a collapse of the Hospital batting as Boyd, Chase (who contributed 47 of 64 runs scored while he was at the wicket) and Cole were out in rapid succession.

Whitehouse and Clarke held up the attack temporarily and both showed some good strokes until the former was bowled by Richards. The remainder of the Hospital batsmen did not stay long at the wicket and fell victims to the very steady bowling of Richards and Brown.

We were all out for 89 and lost the match by 50 runs.

Scores.—

	Guy's
A. V. Hurst, b. Brown	0
G. H. G. Chase, c. Gunn, b. Richards	47
H. A. Thomas, b. Brown	11
D. C. Boyd, b. Brown	2
J. D. Whitehouse, b. Richards	9
S. N. Cole, l.b.w., b. Brown	0
C. B. Clarke, l.b.w., b. Brown	13
H. L. Joyce, b. Brown	0
R. L. Skea, c. Smith, b. Richards	0
S. A. Coffey, c. Blessly, b. Richards	5
J. H. H. Knight, not out	1
Extras	1
Total	89

Bowling.—Skea, 3 for 33; Clarke, 5 for 66; Coffey, 2 for 14.

Hospital Information, etc.

Papers by Guy's Men

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Changes of Address

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L. F. W. Salmon, Capt. R.A.M.C., Anti-Tank Regt., R.A., B.E.F.

E. Smith, B.M., B.Ch., Radcliff Infirmary, Oxford.

Marriage

ROBERTS-HUNTER.—On May 2nd, 1940, in Dublin, Allan T. M. Roberts, of "Hurst," Copthorne, Sussex, to Sheila Mary Hunter, of "Aldersgate," Palmerston Park, Dublin.

Death

STEPHENS.—On May 18th, 1940, Lockhart, E. W., C.B.E., D.L., M.R.C.S., L.S.A., at White Lodge, Emsworth, Hants.

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GUY'S HOSPITAL GAZETTE

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JUNE has burst upon us with a spell of such glorious weather as has amply compensated for the bitterness of the winter. We are stricken with envy at the health and energy of our colleagues at the bases, who have time both to be busy and to sunbathe; we, who are not busy, find the heat of the Borough far from stimulating. This weather has played a large part in the rapid progress made by the enemy, but on the other hand, it greatly facilitated the evacuation of Dunkirk. We cannot hope to emulate the phraseology of the daily Press, but we must record our heartfelt admiration for all who took part in this retreat; in particular, we would express our sympathy to the relatives of those members of our profession, who although non-combatant, have given up their lives. Several of our base hospitals were utilised as "casualty clearing stations" for the treatment of a proportion of the wounded, and two of our mobile teams were sent to aid in the work. Now that the actual invasion of our soil by the enemy has become a very real possibility, the organisation of our medical services must again be passed under review. The Emergency Medical Service was evolved with the primary function of providing prompt treatment and rapid evacuation of civilian casualties arising from air-raid action. The hospital facilities of this service have already been utilised for the treatment of military sick and wounded, whenever it proved more convenient to do so. Our own base hospitals are now situated in areas which can no longer be regarded as completely suitable for the evacuation of our civilian sick. The prospect must now be envisaged of enemy action actually within this country and the classes of cases which may now be expected to occur may be classified as firstly, those resulting from military action, whether civilians or members of the fighting forces, and secondly, the normal civilian sick. Under our present organisation, the first class of cases is dealt with by either the medical sections of the Forces or by the E.M.S., whilst the latter service is responsible for cases in both categories. It would be more satisfactory and more efficient if one authority were to become responsible for all casualties resulting from enemy action, and another authority be charged with the task of organising the available accommodation to the best advantage for the maintenance of the normal health services, and also, of medical education. We have no doubt that the present organisation is sufficiently elastic and that should such dread possibilities arrive all contingencies will have been planned for in advance.

In these times, when so much activity is afoot abroad, it is not unnatural that there should be some feeling of dissatisfaction amongst our students at the dull and uneventful life they lead. It is undoubtedly very difficult for any healthy young man to settle down to study in the present atmosphere of uncertainty. At the same time, in so far as they have been reserved for a definite purpose, all medical students have a very definite duty to perform, and that is to become efficient doctors under very difficult conditions. The question of the functions to be performed by the students, when actual air-raids do occur, has been the subject of much deep thinking and discussion since last September. It is difficult to prepare for conditions of which we have had no experience, but a real attempt is being made to utilise the services of all to the best advantage.

Such arrangements are, of course, far from final and all constructive suggestions as to the most efficient mode of co-operation, emanating from the students themselves, will receive very thoughtful consideration from our authorities.

For the purpose of paper economy, it is necessary to omit, from this issue, the two features "America Revisited," and "This Medicine." They will be continued in the next issue of the *Gazette*.

Obituary

FRANCIS JAMES STEWARD, M.S., F.R.C.S.

FRANCIS JAMES STEWARD entered the Medical School at Guy's in 1889, and before he qualified in 1895 he had won an open scholarship in science, the first prizes for students in the first and second and fourth year, the Beaney Prize for Pathology, the Treasurer's Medal and Prize for Clinical Medicine and Clinical Surgery, the Gold Medal in Chemistry in the 1st M.B., and the Gold Medal in Anatomy and Physiology in the 2nd M.B. In the final M.B. examination he obtained first-class honours in Medicine, Forensic Medicine and Obstetric Medicine. As a record of achievement for a student, this is surely outstanding, and even F. J. Steward himself would probably have admitted that it was, on the whole satisfactory.

On the Junior Staff he held the appointment of House-Surgeon, Demonstrator of Anatomy and Clinical Assistant in the Throat Department. He was appointed Fifth Assistant Surgeon to the Hospital in 1900, and at the same time he became Lecturer in Operative Surgery and Surgical Pathology. He became a full surgeon in 1912, so that for twenty years he headed a surgical firm until he became a consulting Surgeon in 1932. F. J. Steward was a Member of Council of the Royal College of Surgeons for a total of sixteen years, and at one time was a Vice-President of the College. He was on the Committee of Management of the Conjoint Board for six years and Chairman of that Committee for one year. During the Great War he served with the R.A.M.C. with the rank of Lieut.-Colonel. He was one of the first of the medical assessors to sit by the side of the judge in workmen's compensation cases. In all these, and in many other activities outside Guy's he gained a reputation and commanded a respect similar in every way to that which was so manifest at Guy's. If we speak here mainly of his influence at Guy's, it is merely because it was there that most of us knew him and knew his work.

There must be very few of the many hundreds of Guy's men since 1895 who have not gained something from having known F. J. Steward. Of those who became his house-surgeon, few have failed to recognise in him a model and a standard of surgical conduct that they hoped, in their best moments, to approach. Surgical conduct is so much more than mere technique and acumen. F. J. Steward was, incidentally, a beautiful operator—one had only to see his dissections in the neck to realise this—but, after all, surgical dexterity is the commonest (and therefore the least precious) thing about a good surgeon. Though he excelled as an operator, it was his whole surgical outlook that inspired his pupils, and the inspiration remained with them long after they had left his wards. It is difficult to analyse the principles he taught, because his teaching was by example no less than by the words he spoke; but he had, above all other men, a surgical conscience which never for a moment failed him. His one aim in all his work was to do good surgery; it may have been quick or slow, easy or tedious, spectacular or commonplace; he did not mind, so long as it was good; and he was always the shrewdest of judges between good and bad.

His judgment was proverbial. Each successive house-surgeon added to the list of stories that were told to support the suggestion that he had some mysterious sense that enabled him to know what others failed to find out; but those who knew him well realised that there was nothing miraculous about his judgments, they were simply the result of his wide clinical experience, his meticulous care, and his insistance on finding out all the facts. The miracle was that he never failed to observe the standards he set for himself. No case was too trivial for him to scrutinise;

no problem was too difficult for him to give judgment on. When he made up his mind he carried out his treatment with a calm confidence that inspired his ward-clerk no less than his patient. If things, went wrong he may have had regrets, but he never had remorse; and with so refined and sensitive a surgical conscience, this was the measure of his success in living up to it.

F. J. Steward knew the risks of surgery. When he was quite sure that it was right to take these risks, he took them in his stride, but never would he take a risk that care or clear-thinking or patience could avoid. Such was the standard he set by his own practice, and though he may not have stressed it in the words he spoke, it stood out vividly in all his clinical work, and it coloured all his teaching at Guy's. All men admired F. J. Steward, and all who came to know him felt an affection for him that was summed up with such simplicity in the name of "Frankie." He was Frankie to everyone at Guy's.

Frankie could not tolerate deception. Conscious deception he never forgave; unconscious deception he despised as a weakness and a danger, and if ever he found it—no matter in whom—he rebuked it with an austerity that was unanswerable. Yet he was never harsh. He was, in fact, the most sensitive and sympathetic of men, and although in his professional work he never allowed his sympathy to warp his judgment, he had an endless fund of generous encouragement for everyone who was in need. Only those who needed his sympathy know how readily it came from him, always at the right moment, and always with a simplicity and economy of words that stamped it with the character of the man who gave it. If a young house-surgeon was unduly puffed-up over one of his successes, Frankie would either ignore his achievement or even criticise his action. If the same man was unduly cast down by one of his failures, Frankie would somehow or other indicate that he had done very well, or even congratulate him that the result was not worse.

It is no wonder then that his appointment to the Steward firm was generally the happiest time that a man spent at Guy's. He had a chief whose dignity was almost austere in its simplicity, whose example of surgical conduct was something higher than he had imagined possible, and yet whose personality invited co-operation rather than obedience. From the Registrar to the ward-clerk everyone did his best in his own individual way—it was unthinkable that he should do less for the honour of the firm.

Frankie had interests in Guy's far beyond those of his firm. He was always the strongest of supporters of the Clubs Union and of its constituent bodies. He was a constant follower of the rugger team, and he seldom missed a fixture at H.O.P. He was at various times president of many of the clubs and he inspired them all with enthusiasm and vigour, no less than he inspired his surgical firm. In committee work his infallible logic, his clear distinction between right and wrong, and his whole-hearted interest in the welfare of Guy's, played a very large part in the happy development of the School and Hospital during all the years he served them. Frankie had interests wider than surgery. Who, remembering that perfect lithograph by Stanley Cock depicting Frankie as Nijinsky, will ever forget his interest in the ballet?

To relatively very few came the privilege of knowing Frankie in his home, and they alone can know how full and complete a life he lived. At Guy's he was always Frankie—a nick-name that is inseparable from him here, and that recalls so much to Guy's men. At home he was Frankie no longer—there he had a different pet-name, but there, too, it must have been inseparable from him, and must now recall the whole fulness of his family life. It was indeed right that he should have had a different name at home, because there with that same clear and mellow sense of values he lived a different life. At home his austerity left him, and he became at once the head of the free, happy and absolutely united family that his friends knew so well. Those who did not know him in his home marvelled that a man could maintain invariably his meticulous standard of surgical conduct with never a lapse. The answer was in his home; there absolute relaxation and recreation came to him; there complete understanding and sympathy surrounded him. To have seen him picking roses for his wife, or playing tennis with his boys, or nursing the baby of a friend, or dancing a jig in a pair of ladies' high-heeled shoes was to know some of the fulness of his life. Frankie loved truth and whole-hearted endeavour, and one saw that there was as much truth and energy in the happy freedom of his home life, as in the rigid conduct of his professional work.

To have worked with Frankie was to have realised how consistently high it was possible for a standard of work to be. To have played with him in his home was to know how united and completely in sympathy a family could be. That is why those who were his friends will know the depth and the sincerity of the sympathy that goes out to his wife and son at this time.

Congenital Syphilis

A Clinical Lecture delivered at Guy's Hospital by H. C. Cameron, Esq., F.R.C.P.

GENTLEMEN,—By congenital or hereditary syphilis we mean that the parents were syphilitic and that they transmitted the infection to the infant before birth. Neither name is perhaps strictly satisfactory or conveys correctly this implication. The word congenital implies too little. It states that the disease was present at birth and no more. The word hereditary implies perhaps too much. In may seem to place the infection among those diseases which obey the laws of Mendelian inheritance. The name congenital syphilis has become established by usage and is not likely to be displaced.

In syphilis, even more notably than in rickets, we have an example of a disorder in which within the space of a few years successful research has brought about a complete revolution in our conception of all the processes concerned. The whole achievement was concentrated in the seven years beginning with 1903 and ending in 1910. In 1903 syphilis was communicated to apes by Metchnikoff and Roux and the way opened for experimental investigation. At about the same date lumbar puncture, introduced by Quincke, rendered possible the systematic study of the cerebro-spinal fluid. In 1905 Schandinn and Hoffmann discovered the spirochæta pallida. The next year, 1906, Wassermann perfected his complement fixation test, while in 1910 Ehrlich, after so many fruitless trials, reached success at the 606th attempt. As a result of study of the Wassermann test especially, many of the beliefs accepted and taught for generations have had to undergo some revision. Colles, for example, in 1837 emphasised that a child with congenital syphilis will infect a healthy nurse " whether she suckle it or merely handle and dress it; and yet this child is never known to infect its own mother even though she suckle it while it has venereal ulcers of the lips and tongue." Colles's observation was correct, and Colles himself made no attempt to explain the apparent contradiction. Later, however, it was often maintained that the apparently healthy mothers of syphilitic infants—infants who, it was further presumed, must therefore have been infected by the father—had developed an immunity to the virus without themselves acquiring the infection. The Wassermann test has shown that nearly all mothers of syphilitic infants are themselves infected, and that such immunity as they possess is only the immunity against re-infection which is shown by all persons actively infected with syphilis. Again, in order to explain the frequency with which an apparently healthy mother may give birth to a syphilitic infant, the theory was widely held that transmission in such cases was by means of " paternal germ transmission," that is to say by the passage of the infection in the spermatozoon. After the spirochæta pallida had been demonstrated, it became difficult to believe that the protozoon passing in the spermatozoon could infect the ovum alone, without effecting a lodgment at the same time in the maternal tissues. The Wassermann test has shown how prevalent is a completely symptomless syphilitic infection. The few cases in which the test is negative in the mother of a syphilitic infant are more reasonably explained on the assumption that the infection is latent. Similarly, in 1865 Profeta enunciated a maxim sometimes known as Profeta's Law, to the effect that the apparently healthy children of syphilitic mothers did not develop clinical symptoms through contact with their mothers even although suckled by them, a correct observation which was sometimes interpreted to mean that such children had inherited a true immunity to the disease. The Wassermann test has shown that many of these apparently healthy children of syphilitic mothers have latent syphilis.

THE MATERNAL INFECTION OF THE SYPHILITIC CHILD

In the great majority of cases, doubtless, the syphilitic infection originates for the family in the person of the father. Infection of the mother, before marriage or by adulterous connection after marriage, occurs so rarely as to be negligible. In a great number of the cases the time of the father's infection is remote, so remote that the disease has become latent. Often the Wassermann test is no longer positive. Nevertheless the infection is still sufficiently active to be transmitted to the mother. It follows, therefore, that in most syphilitic families the maternal infection is either contemporary with that of the father or, more probably, it is more recent. The percentage of positive Wassermann tests is always much greater in the mothers than in the fathers. Jeans and Cooke, for example, in an extensive study found the maternal reactions positive in some degree in all but 14.2 per cent. For the fathers the corresponding figure of negative reactions was 43.6 per cent. As might be expected the negative maternal reactions were found much more frequently in women whose syphilitic children

had reached later childhood and whose infection, therefore, had existed for a number of years. The reaction in the case of women whose children were under the age of two years was positive in all but 7.3 per cent.

In the acquired syphilis of adults the Wassermann test becomes weakly positive with the development of the primary lesion and strongly positive throughout the secondary stage. After the disappearance of the secondary stage and in the long latent period which commonly follows, there are great individual differences even in the absence of treatment. In some the test remains strongly positive for many years. In others it becomes comparatively soon only weakly positive or negative. All studies of later syphilis show a high percentage of negative reactions, sometimes even in the presence of tertiary manifestations active clinically. A negative Wassermann test, therefore, does not exclude the presence of acquired syphilis. It is probably safe to assume, although it cannot at present be proved, that all mothers of syphilitic infants are themselves infected, and that the small percentage who react negatively have lost the serological reaction and suffer from syphilis in its most latent form.

WASSERMANN TESTS IN CHILDREN

It is very different in the case of congenital syphilis. A positive reaction, in the case of a child with clinical symptoms of congenital syphilis, is almost universal, and in general a negative Wassermann test may be taken to exclude syphilis. There is only one exception to this generalisation. In the case of some young syphilitic infants, presumably those who are infected late in the pregnancy, the reaction may be delayed and appear only after an interval which is never longer than two months. Since in congenital syphilis a positive reaction is almost universal, it is not uncommon to find an infant with a positive test whose father reacts negatively, and occasional, although unusual, to find an infant with a positive test whose mother reacts negatively. If a mother's test is positive, it is likely too that the infant will react positively, but exceptions occur. We have seen that in some young syphilitic infants the reaction may not become positive until the end of the second month. But mothers with latent syphilis and a positive Wassermann test may give birth to infants quite uninfected with syphilis. In congenital syphilis the infection takes place through and by means of the placenta. The placenta opposes a barrier between the maternal blood and the fœtal blood. There must not only be placental infection with syphilis, but the infection must be sufficient to infect the fœtal side of the organ as well as the maternal. In recent and active syphilis some spirochætal infection of the maternal blood stream is constant, and the vibrio always finds its way through the infected placenta to the tissues of the fœtus. In latent syphilis, many years after the primary infection, spirochætæmia in the mother is probably occasional and inconstant, and the placenta may escape infection with the result that the child is born uninfected and with a negative Wassermann test, although the mother has a positive Wassermann test. Such a normal child of a syphilitic mother runs no risk of infection after birth by contact and handling and Profeta's law holds good. A man with a positive Wassermann test and latent syphilis can infect only by sexual connection, because there is a special affinity of the testicular tissue for the still surviving spirochætes. Similarly in a woman with a positive Wassermann test and latent syphilis the placenta, and consequently the fœtus, may become infected, perhaps because of a similar affinity between the spirochæte and the placenta. But no latent syphilitic man or woman is infective for third persons by the ordinary contacts of life.

Although the value of the Wassermann test in syphilis, and especially in congenital syphilis, is very great, it is not to be regarded as invariably resolving all doubts and giving an indisputable verdict. There are times when the infant's reaction is positive while that of the parents is negative, just as there are times when the parents' may be positive and the infant's negative. These contrasts are explicable and must not be regarded as indicating any failure of the test. The technique of the test, however, is not simple, and uniform results can only be obtained in laboratories under expert and practised control. Comparison between the findings of different laboratories carried out simultaneously on the same material have not always shown agreement. A more common difficulty lies in the varying strength of the reaction. The test is usually carried out with two separate antigens, a simple alcoholic antigen and the same antigen to which a small amount of cholesterol has been added. The cholesterol antigen is much the more sensitive and reacts at times with non-syphilitic sera. The alcoholic antigen is the more reliable and furnishes the strongly positive reactions. Weakly positive reactions are those which are negative with the aocoholic antigen but give some fixation with the cholesterol antigen. Weak reactions are only to be relied on when they are found constantly on repeated examination.

The Wassermann test is sometimes reinforced by the Kahn test, the procedure for which is

much simpler. Although on the whole very reliable, and seldom giving a reaction in the absence of syphilis, the test fails at times to give a positive reaction in the presence of undoubted syphilis with a strong positive Wassermann test. For the purposes of primary diagnosis it cannot take the place of the Wassermann test.

THE SYPHILITIC FAMILY

When the fœtus is infected through the placenta the fœtal tissues offer but little resistance to the spread and multiplication of the spirochæte. The organism is usually found in enormous numbers in the lesions of the skin and mucous membranes, in the liver and in most of the tissues of the body. That in congenital syphilis the infection is usually maximal is shown not only by the strength and long persistence of the Wassermann reaction, but by the high mortality rate among young children as well as by the frequency of stillbirths and of premature births. In families in which one infant had died of syphilis it was found that 59 per cent. of all infants died. The deaths occur as a rule in infancy or early childhood. In later childhood, among the manifestations of congenital syphilis neurosyphilis alone has a high mortality. Prematurity and stillbirth are both said to be twice as common in families with a syphilitic child as in non-syphilitic families. Statistics of this nature are, however, difficult to interpret because of the varying definitions of what is meant by a syphilitic family. If by that is meant the family of a syphilitic father, the taint will be far less in evidence than if the definition is based on the syphilis of the mother. Fathers with latent syphilis will have syphilitic offspring only if the mother, too, has become infected. The percentage of affected children and the mortality are still greater when the syphilitic family is defined as one into which a syphilitic child has already been born. In syphilitic families so defined, of 161 children 128 were found to be syphilitic, 112 with clinical symptoms of one sort or another, and 16 with a positive Wassermann test and a latent infection (Jeans and Cooke). Even if the children not examined had been all free from syphilis the percentage of infection remains very high. Probably more than 50 per cent. of children in syphilitic families so defined are syphilitic. As might be expected, both the incidence and the mortality are likely to be highest in the first-born and in the older members of the family. A tendency for the later members to escape is often apparent. Yet there are many irregularities in transmission, and an infant with frank syphilis may be born after brothers and sisters who are normal, or a normal infant in the midst of syphilitic brothers and sisters.

THIRD GENERATION SYPHILIS

An extensive literature exists upon the question of the transmission of syphilis to the third generation. In such a case the same strain of spirochæte pallida which originated in the grandparents and which was passed from them to their congenitally affected daughter is able to infect the grandchild *in utero*, and the new generation also shows signs of congenital syphilis. The difficulty must always be to exclude the possibility that the congenitally syphilitic mother of the second generation has been reinfected by the father, after cure or disappearance of her congenital infection. A negative Wassermann test in the father does not disprove this possibility because latent syphilis with a negative Wassermann reaction is not uncommon in the fathers of children with congenital syphilis. In the literature of cases thought to show congenital syphilis in the third generation, transmission through the mother has alone been recorded with any frequency. Since a woman with acquired syphilis may continue to give birth to syphilitic children for twenty years or more after infection, it is not difficult to believe that the spirochæte may remain active in a woman with a congenital infection for the same length of time. In the male there does not seem to be the same tendency for the infection to persist in the testicular tissue in the congenital form which is apparent in the acquired.

THE CLINICAL DIAGNOSIS OF CONGENITAL SYPHILIS

Valuable as the Wassermann test is, it cannot obviate the need for accurate clinical diagnosis. In practice the test can only function as confirmatory evidence for or against a diagnosis which is based on clinical experience, and as a means of estimating the success or progress of treatment.

Syphilitic infants rarely show evidence of syphilis at the time of birth. If they do, the infection is usually of great severity. If the infant is born prematurely with evidence of syphilitic infection, death is almost invariable. In the great majority of cases the first symptoms appear after an interval of from one to two months. After six months, first manifestations are of great rarity. Rash and rhinitis are by far the most common of these manifestations, and, in addition, about one-fifth of the cases, at a somewhat later date, usually at from three to five months of age, show clinical evidence of epiphysitis. Latent cases with no clinical symptoms, but with a positive Wassermann test, are found rarely in infancy, but with increasing frequency later, after the active symptoms of early infancy have disappeared spontaneously or under treatment.

The rhinitis of syphilis has little that is characteristic. It is persistent and the discharge may be blood-stained, but does not differ from chronic rhinitis of origin other than syphilitic. It has an importance because it is apt to interfere seriously with the efficiency of the infant's suction. The rash, on the other hand, has a high diagnostic value. Three types of skin infection are found, each of which is very characteristic, a diffuse papulomacular rash, an induration of the soles of the feet and palms of the hands, and an induration, infiltration and fissuring of the soft tissues around the mouth and anus. The generalised rash does not differ greatly in type from that of acquired secondary syphilis. Macules, papules or squames may predominate. The colour is compared to that of raw ham when it first appears, gradually becoming more pigmented to a coppery or bronze hue. Spirochætes are present in profusion in serum expressed from these lesions. The induration of the soles of the feet and, to a less extent, of the palms of the hands is highly characteristic. The skin becomes thickened, fixed, reddened and shiny, with well marked lines and creases forming a pattern upon it. Ultimately there is profuse desquamation. The similar induration of the soft tissues around the mouth and anus is prone to be well marked in cases with a severe infection, especially in premature infants. The infiltration of the subcutaneous tissue goes very deep, so that the mobility of the lips in sucking or crying is lost and cracks and fissures are formed, which are apt to bleed freely. The surface of the infiltrated area is apt to be covered with incrustations of lymph. In the most severe infections pustular and pemphigoid lesions may predominate, and there may be confusion with the more common pyogenic infection of the skin of the new-born known as pemphigus neonatorum, or in its confluent form dermatitis exfoliativa. In practice such septic rashes are notoriously apt to arouse unfounded suspicions in the minds of the relatives. In sepsis, the initial lesion is everywhere the same, and there is none of the tendency, usually shown by the syphilitic eruption, to exhibit at the same time such different leasions as macules, papules, vesicles and squames. The septic rash is, as a rule, the more profuse and spreads with much greater rapidity to new parts. In exfoliative dermatitis the impression in the minds of the parents is often that the child has been scalded. In cases of doubt an expert search should be made for the spirochætes which are always present in syphilitic skin lesions. It is to be remembered that occasionally at this early age the Wassermann test has not yet become positive. Bony involvement shows a characteristic X-ray appearance. The periosteum has laid down a layer of newly formed bone, the outline of which may be seen to surround the shaft. The epiphyseal line is irregular and ragged, and at times it has separated itself from the diaphysis. Although the symptom of pain and pseudoparesis may appear to involve one joint alone, X-ray examination almost always shows widespread changes in all the long bones, often quite as characteristic as those at the site of clinical symptoms. The age limit of between three and six months of age is very constant, and is important when we remember that manifest infantile scurvy does not appear before the seventh month. Unlike later bone syphilis, there is no tendency to gummatous formation or to necrosis and ulceration. The painless fusiform swelling of dactylitis is an occasional manifestation of this early bony syphilis. It may be differentiated from the tuberculous form of dactylitis by its early appearance in an infant a few months old, by the absence of any destructive changes in the bone such as cavitation, necrosis or fistula formation, and by its predilection for the proximal phalanx of one or more fingers. An X-ray examination shows the dense shadow of a proliferative osteoperiostitis.

In early congenital syphilis lesions other than those of skin and bones are uncommon. Iritis and optic neuritis are rare. A syphilitic nephritis is recognised and the spleen is often, the liver occasionally, enlarged and palpable. The lymphatic glands, as in the secondary acquired form, are enlarged and some diagnostic importance attaches to this in the case of the epitrochlear glands because they are not likely to be enlarged from any other cause. Condylomata, of mouth or around the anus, are occasionally found, and they have an importance because they tend to occur late, bridging the gap between the symptoms of infancy and the later manifestations. The late manifestations appear at widely different times and may be delayed till early adult life. They are perhaps most commonly met with between the ages of seven and fifteen. Interstitial keratitis is by far the most common. Much more rarely, and often in association with keratitis, we find the painless symmetrical arthritis of the knee-joints known as " Clutton's joints," gummata of bones or soft parts, syphilitic osteoperiostitis of the tibia, and a nerve deafness of sudden onset, usually symmetrical.

Of importance for diagnostic purposes are the scars left by the active infections of the infantile stage, especially Hutchison's teeth, syphilitic chorio-retinitis and iritis, rhagades radiating from the mouth, the depressed bridge of the nose, bossing and squareness of the skull and stunting of bodily stature and development.

NEURO-SYPHILIS

In all syphilitic infection, presumably at an early stage, the spirochæte is carried to the central nervous system. We do not know what determines its persistence and development there in a proportion only of the cases. It is significant that as a rule neurosyphilitics show little evidence of infection of other systems. Neurosyphilis, in the congenital disease, is not a common response to the infection. It is important, not from its frequency, but from its fatality, because of the disastrous effect upon the developing intelligence of the child, and because of its resistance to treatment. Neurosyphilis alone of the later manifestations of congenital syphilis is accompanied by a considerable mortality. The cerebral damage and the danger of a fatal ending are increased by the insidious nature of the onset, which determines that the children are usually brought for treatment when the processes of disease are already far advanced. Sex influence is little marked in congenital neurosyphilis, in contrast with the great male predominance in the acquired form. The only way to recognise neurosyphilis in its early stages in syphilitic children is by routine examination of the cerebro-spinal fluid. Experience seems to show that if a congenitally syphilitic child is going to develop neurosyphilis it does so at an early stage, and that it is rare for neurosyphilis to begin in later childhood. In 646 children with congenital syphilis and a positive Wassermann test in the blood, the Wassermann test was also positive in the cerebro-spinal fluid in 174, of whom 61 showed some clinical evidence of neurosyphilis (Jeans and Cooke). It is clear that the best time to treat neurosyphilis in the child is before and not after the appearance of symptoms. Of these symptoms the most common are paralyses, convulsions, hydrocephalus, dementia and optic atrophy. In early infancy the most frequent manifestation is that of a meningitis due to meningo-vascular syphilis with symptoms at times resembling those of tuberculous meningitis and with not dissimilar findings in the cerebro-spinal fluid. The Wassermann test in the fluid is, however, invariably strongly positive and the response to antisyphilitic treatment is well marked. When hydrocephalus in infancy is due to neurosyphilis, which it occasionally is, a similar satisfactory response may be found. In later childhood neurosyphilis is notoriously refractory to treatment. Early diagnosis is essential for cure, and is achieved only by a study of the cerebro-spinal fluid, its Wassermann reaction, differential cell count, with its high mononuclear count, the globulin percentage and the colloidal gold reaction. This last test, introduced by Laval in 1911, is of help in giving additional information as to the extent of the pathological changes likely to be present.

THE PROGNOSIS OF CONGENITAL SYPHILIS

To sum up, we may say that in syphilitic families the mortality rate among the young children is very high indeed, although it is not possible to determine how far this high rate is due directly to syphilis and how far to secondary infections in infants with malnutrition. In later childhood this high mortality is not found, except in the minority who suffer from neurosyphilis. The response to treatment is almost always prompt and satisfactory, except in the case of neurosyphilis. For some reason the recovery from interstitial keratitis is often slow, although ultimately it is usually satisfactorily achieved. The blood Wassermann test, however, remains positive unless therapy is continued for a long time. Children who have been treated only to the point at which symptoms disappear may again develop signs of the disease after a latent period of many years. With our present knowledge the only criterion of cure is the absence of evidence of active clinical disease for many years with a persistently negative Wassermann test. Spontaneous recovery is not unusual, and we may meet with children known to have suffered acutely in infancy with a positive Wassermann test who in later childhood appear both clinically and serologically free from syphilis. Infants respond much more readily than older children, and serological cure is more frequently established. Among older children many remain with strongly positive reactions in spite of persistent and thorough treatment. Some prognostic importance may be attached to a decline in the strength of the serological reaction. The treatment of the syphilitic mother and its effect in lessening the incidence in the family of further syphilitic infection cannot be discussed here. Those fruitful years from 1903 to 1910 have borne rich results in the treatment of the child with congenital syphilis.

Guy's Hospital Gazette
(ESTABLISHED 1872)

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Sector News

Guy's Letter

THE last fortnight has seen a great deal of activity at Guy's. International affairs no longer reflect themselves in out-paitents; indeed, their number is steadily on the increase. Ward cases while relatively few in number, provide a wealth of clinical material for those who care to look for it. Spare time is spent sunbathing either in the park or up on one of the balconies in the surgical block. In this respect we are rather envious of our colleagues at some of the bases where swimming baths are readily available.

Another squash racquets tournament between residents and students was held on Thursday, June 6th. The match ended in a draw, the combatants following their respective games retired to the " George," where much the same result was achieved in spite of the numerous reinforcements on both sides.

Later the same evening a dance was held in the nurses' home and needless to say it was a huge success. A large number of sisters and nurses, and an even larger number of staff and students were in attendance. As a result the nurses were very popular, but they accepted the unusual homage and tribute paid them with their customary grace.

Everyone is glad to see the numerous improvements to Guy's buildings and grounds that are being effected. The medical block looks very fresh in its new coat of paint. If only we could have another look at Thomas Guy in the quadrangle, I am sure we should all feel very grateful.

B. L.

Orpington Letter

ON May 31st, just before midnight, the first convoy of wounded from Dunkirk arrived in Orpington. For everyone of us it was our first real experience of the men who had actually been in contact with the enemy, and we were proud to see their amazing good spirits.

Some of them had been wounded for three or four days and had been on the move almost the whole time, while others had been in the water for many hours. The medical treatment which the men had received was surprisingly good, considering the terrible conditions under which the dressings must have been done.

The most striking cases were the burns of face and hands, the tanning of which had made every man as black as a nigger. In fact, our Military Registrar spent the next few days looking for the " Lascars," whom he was certain he had seen arriving. The majority of the rest of the cases were shrapnel wounds, of which a surprisingly high percentage were in the buttocks.

About one-third of the men are French, and every nurse, massage student and doctor has been racking his or her brains to recapture what power over " La Langue Francaise " they once possessed. The results on the whole have been satisfactory and definitely amusing to both parties. The two major difficulties encountered were first to discover when a man had last had his bowels open and secondly, to find out each man's rank, particularly one enormous Frenchman, who caused consternation by insisting that he was a Brigadier Chef.

The first convoy consisted of 35 cases of which we had a few hours warning, but after that, Dame Rumour held the field in no uncertain manner. The next night we were told to expect 50 patients, this had grown to 100 by midnight, only to dwindle slowly through the early hours back to 50, then to 20 and finally to 12. We were not surprised when at about 4.30 a.m. eight cases arrived from a completely different source. However, over the next three days our numbers grew to 120 and it was decided to cancel our deep-laid plot to ambush an ambulance train as it passed the back of the hospital.

It is early yet to speak definitely about the progress of the wounds, especially of the burns, which by the time they arrived were badly infected, but the progress in the majority of cases is very satisfactory.

Other news is from the matrimonial front, and we would all like to congratualte Bucknall on his recent marriage and to wish him and his wife every happiness and success.

A. T. M. R.

Pembury Letter

SINCE our last letter we have been a hive of industry, dealing with the casualties from Dunkirk. Our normal team of surgeons, augmented by Mr. Darling have been working at high pressure. Mr. Turner, Mr. Hughes, Mr. Chapple and Mr. Lambrinudi have all become several years younger by their extra exertions. We offer them our congratulations.

Among our patients have been quite a number of French soldiers, both officers and men. It has done us much good to see and treat our allies, and we have come to realise some of the

added difficulties that beset them. For instance, the British soldier generally knows more or less what is happening to his family; but not so the French. Many of these men find themselves hospitalised in a strange country, wondering what fate has befallen their families, who used to live in North-Eastern France. Yes, indeed, we are wiser and sadder. Finally, we offer our thanks to Mrs. Chapple and Mrs. Jacoby, who have done so much to overcome the language difficulty, and we know their efforts have brought great comfort to the Frenchmen. In addition, their material help was spread to soldiers of both nations.

And now to Calais. In the historic defence of that port, there figured the Queen Victoria Rifles. Part of this regiment was stationed near Pembury for many months, and last winter large numbers of them were treated by us. We came to know and like them. Some were our personal friends. When the news of Calais was announced, we were thrilled; but our heart-strings were rent asunder. They lived to die, that we might live. With saddened hearts we salute their gallantry.

Great changes are now taking place at Pembury, and at present we can give no details. In our next letter, perhaps, we shall be able to tell you more.

N. N. J.

A Touch of Variety

LAST Saturday night we had another evening's entertainment organised by Tom Hills from our own hospital talent, and assisted by outside artists and the St. Pancras Players. It was a really good evening's entertainment, reminiscent of the early days of the Starling's Review, characterised by its smooth production, excellent presentation and novel ideas, which spoke of the careful thought and long rehearsal given to it. We should all appreciate another show like this, and I understand it is hoped to have collected a similar selection of artists for an entertainment in about a month's time.

The first half of the show consisted of a short play by Noel Coward—" Fumed Oak "—more than ably presented by the St. Pancras Players. We were warned at the start that it was a thoroughly unpleasant comedy, but that only seemed to heighten our appreciation, and in particular our sympathy for Henry Gow (played by John Eurek), who finally could tolerate no longer the nagging meanness of his wife and mother-in-law, and the adenoid adolescence of his daughter. All four characters were well portrayed, but in particular I liked Henry Gow.

The second half, although not quite so polished in its production as the first, was of a high standard. An amusing little sketch called " Little Mother " was followed by Luntz and his harmonica. On an instrument of only two inches in length he produced a varied selection of tunes, all faultlessly played. Mina Menova, who then sang for us, has a very lovely voice, and it was a pity that at times the piano accompaniment was too loud, and tended to hurry her. We liked her, and hope she will sing for us again.

We have all seen John Gordon do his conjuring tricks before, but he produced a fine selection and presented them most effectively this time. He also produced a pretty girl for a trick entitled the Girdle of Venus, a new and clever illusion.

Emilio showed us how an accordion can really be played, and met with a most enthusiastic reception. We could have listened to his playing as long as he could play—and his turn was all too short.

The show closed with an original musical sketch—" The Jug and Bottle Swing "—by Rhonchetti, Gordon and Trethowan, who gave us an amusing song—" She had to go and lose it at the college "—and further demonstrated how drumming could be done without any drums, with assistance from such common everyday articles as a wash board, empty bottle and even a Guy's Evacuation bed-pan. All together a good finish to one of our best shows.

G. E. H. E.

Correspondence

Medical Diseases of War

To the Editor of the GAZETTE

SIR,—Mr. Layton's writings are always vigorous and refreshing, and his excellent review of " Medical Diseases of War " is no exception. His experiences related there are of such interest and importance at the present time that he might well be asked to contribute a series of articles on them, as many of us may stand in need of advice along these lines before we are much older.

He will, I am sure, however, forgive me if I say that many bacteriologists will part company with him on the subject of B. Dysenteriæ Shiga and Flexner. In the cases of influenzal pneumonia that he mentions, the secondarily infecting organisim is described as "A Gram-negative bacillus *morphologically* identical with Shiga and Flexner." Yet surely every bacteriologist knows that these organisms can never be identified morphologically, and it is every bit as likely that these organisms were plain B. Coli, B.Friedländer or even B.Pfeiffer (if the bacteriologist was much overworked at the time). Such organisms as B.Dysenteriæ Flexner or Shiga can only be identified by cultural methods followed by tests with appropriate sera, and it seems very unsafe to say that "there was little doubt that out there the common secondarily infecting organism in the lungs of men dying of infllenza was the dysentery bacillus."

Furthermore, the fact that the identification of the organisms was carried out on morhpological grounds raises doubts also as to the indentity of the organisms found in the inoculation abscesses in the buttock, as the same principles would apply to these, though one gathers that some sort of cultivation was carried out in these cases. But what sort of B. Dysenteriæ was it that could not be grown unless special measures were taken to suppress the few contaminating staphylococci? There should surely have been no difficulty in growing such an organism if the appropriate media were used. Personally, I am always inclined to think that many of these infections following an injection are due to an unjustifiable reliance on spirit as a sterilising agent for syringes and needles. Professor Bigger's recent work following the deplorable occurrences in Ireland cannot be too widely known. He showed that neat spirit was hardly antiseptic at all, and only became feebly so on dilution to 50 per cent.

Yours, etc.,

J. W. SHACKLE.

Brooklea,
Scrase Bridge,
Hayward's Heath,
Surrey.

"Criticism"

To the Editor of the GAZETTE

SIR,—"Criticism is seldom constructive," so runs a sentence in your editorial of June 1st. Nevertheless, I will venture to criticise, even at the risk of being called unconstructive.

The article goes on to say that, "We each have our appointed task to perform," that "Our organisation as a unit of the E.M.S. is under constant review," and that "As far as practice can make perfect we are doing our best to be prepared."

Is there, in such phrases, a trace of the old complacency of early war days, which we hoped had been abandoned? Is this an adequate answer to the urgent desire of medical students to serve their country to the best of their ability?

During the last few days we have all been acutely conscious of our relative inactivity. A consciousness that has set many minds wondering (some, perhaps, for the first time) whether our services are being used, and will be used, to the best possible effect. A consciousness which, perhaps, called forth your article designed to reassure us on such a scare?

The statement that we each have our appointed task to perform is true—on paper. For a list has been posted allotting us to various jobs should air raids occur. But it is freely admitted that only a percentage of the volunteers available will be required at any one time. What of the rest? Can we assure ourselves that now, and in days to come, a large amount of relatively skilled labour is not going to be wasted? I am not alone, I think, in saying that I have become increasingly worried that we may, in fact, find ourselves without an effective job. Is there nothing we can do? Are we to pursue our studies for the week, month, or year, necessary for qualification, and until then to take no active part in the war?

If that is indeed the best task we can perform we shall certainly accept it; and let us accept it in a spirit which shows that we are determined to qualify at the earliest possible moment. Clinical teaching is going on at the present under conditions that are a handicap to even the most enthusiastic student. But that is no reason why everyone should not work at such pressure, and with such little regard for relaxation, that exams. may be passed at the first attempt, and our services may be available to the country at the earliest possible moment.

But are we convinced that there is nothing else we can do? During the last few days many envious remarks have been made concerning those who are fortunate enough to have been assisting some of our mobile surgeons in Kent. There is not one of us, I think, who would not jump at such a chance to "do our bit" should it come our way.

It is likely, in the near future, that there will be a shortage of trained nurses. It is likely that there will be a considerable stream of casualties reaching this country during the next few months.

Quite a lot of effective help could surely be given with treatment of war-wounded by students who have had experience in the surgical wards. I suggest that our surplus labour could form an excellent reservoir, from which dressers could be drawn, and sent to hospitals where help was most urgently required. That would be the least we could do to ensure that the men of the forces are not deprived of the fullest possible attention at the earliest possible moment.

To conclude, may I say that we will willingly follow any course of action or inaction as may be directed; but that inaction comes very hard to able-bodied young men at times like this, unless we are convinced that there is no active help we can give.

Yours, etc.,
STUDENT.

Medical School,
Guy's Hospital, S.E.1.

Sport

Rugby

SEASON 1939-40

THE season of 1939-40 being completed, I have pleasure, as in past years, in enclosing Chart and Statistics of the 1st XV.

I do not propose to make any comparison with past season's figures, first because the whole fixture list was an emergency one, and also due to the very severe weather during January and February no less than eight matches were scratched, leaving only 22 games played.

No matches were played in the Hospital Cup competition, but seven-a-sides games were played, the winners being St. Mary's Hospital; St. Mary's are also to be congratulated on winning the seven-a-sides at Twickenham this season. If these records are correct, Bulstrode and Williams played in all games.

We failed to score on four occasions, while our opponents only failed on one occasion, *i.e.*, King's College Hospital. Our highest score was 43 points against Catford Bridge, and the highest score against us was 25 points by Cambridge. To Mr. G. A. R. Winston we should like to express our gratitude for arranging the fixtures list under most difficult circumstances, and the writer would express his thanks for the assistance rendered by Mr. J. C. Bulstrode by whose help the complete statistics were made possible.

Thirty-four players have taken part in 1st XV matches as follows: Bulstrode, Williams (22); Kynaston (21); Albers, Babrow, Crawford (19); Mullins, Osmond (18), Renton (17), Van Steytler (14); Darke, Fuller, Gartrell, Lewis, T.L.T. (13); Charlton (12); Rochford (11); Finnegan, Sharpe, Skea (7); Halamandres, Lewis, W.J., Vann (6); Harrett (5); Lane, Roberts, Phillips (4); Elsworth, Lillywhite (3); Coffey (2); Boyd, Camp, Carruthers, Christellis, Joyce and Sanders, 1 each.

The following have scored tries: Gartrell (13); Crawford (12); Babrow (9); Kynaston (7); Phillips (4); Van Steytler, Albers, Renton, Williams, Charlton, Coffey (2); Camp, Lillywhite, Sharpe, Fuller, Bulstrode and Mullins (1).

The following have scored goals:—

	Tries Converted	*Penalty Goals*	*Dropped Goals*
Kynaston	17	—	—
Van Steytler	—	—	4
Mullins	12	8	—
Babrow	—	—	1
Phillips	3	1	—

making a total of 63 tries, 32 tries converted, 9 penalty goals, 5 dropped goals. Total points, 300.

Our opponents' score was as follows: 57 tries, 19 tries converted, 8 penalty goals, 6 dropped goals. Total points, 257.

Therefore the completed figures are: Played, 22; won, 12; lost, 10; drawn, 0; points for, 300; points against, 257. Average points per game: For, 13.6; against, 11.6; percentage, 54.5 per cent.

ROY C. HOLLOWAY,
Hon. Life Member, G.H.C.U.

Cricket

GUY'S *v.* THE WANDERERS

THE Hospital met the Wanderers in their first home match of the season at Honor Oak Park on Wednesday, May 8th.

Skea captained the side in the absence of Knight, and on winning the toss he elected to send our opponents in to bat. He was amply justified by this policy, for by 1 o'clock half the side were out for 57 runs, but owing to lack of change bowlers we were unable to follow up this advantage.

Skea and Coffey opened the bowling and, with Coffey making the new ball swing away late to the off, Wakeford and Ingram were content to play quietly until the former edged one into the wicket-keeper's hands. Skea bowled Sears, Jaubert and Hoather, and a few minutes later brought the ball back sharply from the off to bowl Ingram.

Wilmot replaced Coffey and bowled a steady length, keeping the batsmen quiet, while Skea kept the other end going without further success until the luncheon interval.

GUY'S HOSPITAL R.F.C.

SEASON 1939-40

96th Season

Average Points per Game (For): 13·6

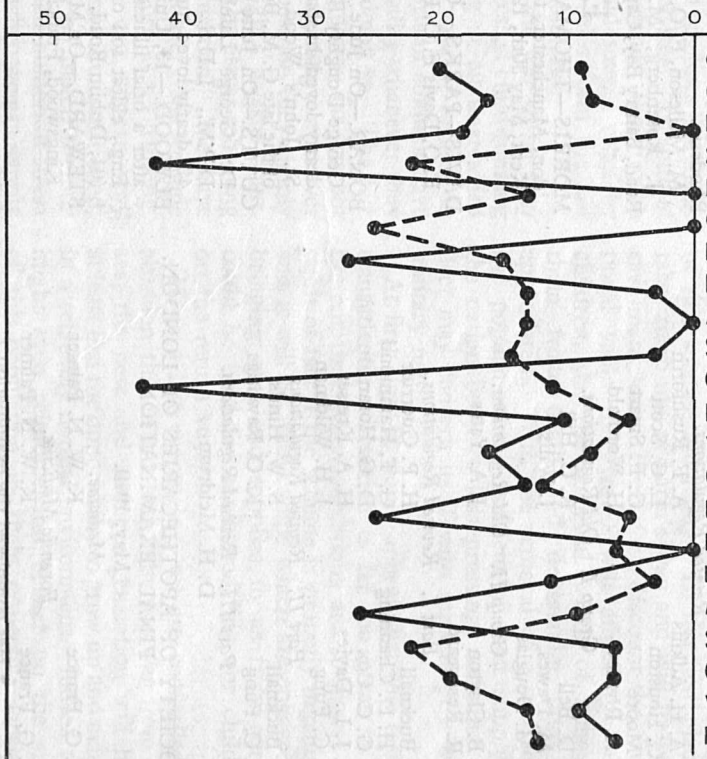
Total Points (For): 300

PLAYED	WON	DRAWN	LOST
22	12	0	10

Percentage: 54·5%

Average Points per Game (Against): 11·6

Total Points (Against): 257



OPPONENTS	DATE	Gd	SCORE Points For F	A	Gl.	T	Against Gl.	T	GOALS	TRIES
Catford Bridge	1939 Sept. 30	H	20	9	1	5	–	3	Kynaston.	Gartrell 3, Renton, Albers, Van Steytler.
Old Tiffinians	Oct. 7	H	16	8	2	3	1	1	Kynaston 2.	Williams, Kynaston, Gartrell, Crawford.
Kings Coll. Hospital	" 14	H	18	0	2Φ	3	–	–	Kynaston, Van Steytler. Φ	Gartrell 2, Kynaston, Charlton
St. Bart's Hospital	" 21	H	42	22	8Φ	1	3+	3	Kynaston 6, Mullins, Steytler. Φ	Crawford 3, Coffey 2, Van Steytler, Williams, Babrow.
Harlequins	" 28	H	0	13	–	–	2	1		
Cambridge Univ.	Nov. 1	A	0	25	–	–	3ΦΦ	4		
Metropolitan Police	" 4	H	27	15	6ΦΦ	–	2Φ	2	Kynaston 4, Steytler, Φ Mullins +	Crawford 2, Babrow, Albers.
Rosslyn Park	" 11	A	3	13	–	1	2	1		Crawford.
An Army XV	" 18	H	0	13	–	–	2	1		
St. Thomas's Hospital	" 25	H	3	14	–	1	3Φ	–		Crawford.
Catford Bridge	Dec. 2	H	43	11	7ΦΦ	4	3ΦΦ	–	Phillips 3, + Mullins 3, + Kynaston.	Gartrell 3, Crawford 2, Phillips 2, Renton, Babrow.
Bedford	" 9	H	10	5	1Φ	2	1	–	Babrow. Φ	Gartrell, Camp.
Wasps	" 16	H	16	8	3+	1	1	1	Mullins 2, + Phillips	Phillips 2, Babrow.
Oxford Univ.	1940 Feb. 20	A	13	12	2	1	–	4	Mullins 2.	Crawford 2, Kynaston.
University Coll. Hosp.	" 24	H	25	5	5	–	1	–	Mullins 5.	Babrow 3, Gartrell, Kynaston.
London Hospital	Mar. 2	H	0	6	–	–	–	2		
London Irish and Welsh	" 9	H	11	3	1	2	–	1	Kynaston.	Babrow, Mullins, Kynaston.
Aldershot Command	" 16	A	26	9	3Φ	4	1+	2	Steytler, Φ Kynaston, Mullins.	Fuller, Kynaston 2, Charlton, Bulstrode, Babrow.
St. Mary's Hospital	" 20	H	6	22	2++	–	4++	2	Mullins. ++	
Gloucester	" 23	A	6	19	1+	1	1Φ	5	Mullins. +	Lillywhite.
Wasps	April 6	H	9	13	–	3	2ΦΦ	2		Gartrell 2, Sharpe.
Rosslyn Park	" 13	H	6	12	2++	–	1+	3	Mullins. ++	

Indicates:— Φ Dropped Goal + Penalty Goal

During the interval a cloud had gathered over the ground, but at 2.15 p.m. our opponents insisted on going out to bat in a poor light. The batsmen, however, managed to survive the early overs by carefully watching the ball. They gradually gained the upper hand against a declining attack, and reached the respectable total of 157.

Hurst and Thomas opened the Guy's innings, and the former took 10 runs off Ransom's first over, but Thomas was out l.b.w. to the third ball in the next over. Cole, Fuller and Hurst quickly succumbed to the good bowling of Ransom and Ingram, but Skea rose to the occasion and tried to redeem the situation; it must have been in desperation that he hit Ingram for six on to the tennis courts.

Gadsby came on to bowl to relieve Ransom, and he quickly dismissed the "tail"; Joyce alone played him with confidence, but our innings closed for a mere 48 runs after 70 minutes' batting.

Scores.—

Guy's	
A. V. Hurst, b. Ransom	14
H. A. Thomas, l.b.w., b. Ingram	0
S. N. Cole, b. Ingram	0
D. N. Fuller, c. Strike, b. Ransom	0
J. R. Lauder, b. Gadsby	4
R. L. Skea, c. Soole, b. Gadsby	16
S. A. Coffey, b. Gadsby	0
A. Wilmot, b. Ingram	2
G. H. Pearson, c. & b. Gadsby	0
H. L. Joyce, b. Ingram	5
G. A. Albers, not out	1
Extras	6
Total	48

Bowling.—Skea, 6 for 61; Coffey, 1 for 40; Wilmot, 2 for 42.

Hospital Information, etc.

Pass List

UNIVERSITY OF LONDON.

3rd (M.B., B.S.) EXAMINATION FOR MEDICAL DEGREES.

May, 1940.

Pass.

C. K. Cole	I. McD. G. Stewart
G. N. L. Godber	W. G. Tillmann
W. C. Lawrence	H. D. Venning
F. H. Lee	L. J. Wolfson

Revised Regulations.

T. A. H. Adkins	A. F. Rushforth
J. C. Houston	L. G. Scott
R. Moore	G. F. Smart
H. A. Rowley	H. Wormald

Group I. Old Regulations.

A. D. Bell	R. C. Hill
A. M. Dawes	J. Wills
D. M. Douglas	

Group II. Old Regulations.

R. B. Clayton	J. A. Yates
E. R. Roseveare	

Part I. Revised Regulations.

C. Bucknall	H. P. Guerrier
G. H. D. Channing	G. T. Hammond
A. G. C. Cox	D. G. Horan
G. J. L. Davies	H. A. Kreiser
O. C. Fung	J. H. Wildman

Part II. Revised Regulations.

C. Bucknall	S. W. Hinds
O. C. Fung	K. O. Rawlings

Part III. Revised Regulations.

D. H. Meldrum

SOCIETY OF APOTHECARIES OF LONDON.

FINAL EXAMINATION.

May, 1940.

Medicine.

*G. G. France	K. W. N. Palmer

Forensic Medicine.

*G. G. France	K. W. N. Palmer

* Has completed the examination.

Papers by Guy's Men

Pearson, R. S. Bruce. Steatorrhœa with Radiological changes in Vertebræ. *Proc. Roy. Soc. Med.*, 1940, **33**, 414.

Ogilvie, W. H. Surgery of infected wounds. *Lancet*, 1940, i., 1019.

Changes of Address

J. R. Forbes, Surg.-Lt., R.N., H.M.S. *Trelawney*, c/o G.P.O., London.

O. Hume, L.D.S., R.C.S., Box 710, Bulawayo, S. Rhodesia.

M. Malleson, F./O., R.A.F., Chester.

J. Rosenberg, M.R.C.S., L.R.C.P., 53, Victoria Road, Bantry Bay, Cape Town.

Engagement

MORRIS—THOMAS.—Tom Arthur Morris of Swindon, Manchester, to Rosemary Thomas of Pembrey, Kent, May 30th, 1940.

Marriage

DAVIS—PARKS.—On May 19th, 1940, at Maidstone, E. O. Davis F./O. R.A.F., to Sister M. E. Parks.

Deaths

BONAR.—On June 7th, 1940, very suddenly, Thomas George Doughty Bonar, M.D., M.S., F.R.C.S.(Ed.), dearly loved husband of Cora Elizabeth Bonar, 10, St. John's Wood Park, N.W.8, and younger son of the late G. M. Bonar, of Hull.

CUTTS.—On June 6th, 1940, following an operation, Dr. George Lambert Cutts, M.R.C.S., L.R.C.P., D.P.M., L.D.S., Surgeon-Lieut., R.N.V.R., aged 49, dearly loved husband of Joyce Cutts.

ELWOOD.—13, University Square, Belfast. June 1st, after a brief illness, William Henry Elwood, L.D.S, Eng., eldest son of the late W. H. Elwood, L.D.S. (64, Dublin Road, Belfast.)

STEWARD.—On May 31st, 1940, at Dinis, The Glade, Kingswood, Francis James Steward, M.S., F.R.C.S.

EDS. { N.A.N. B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

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PASSIM

INTERNATIONAL events race onwards at an alarming speed. In these very few months we have watched neutral countries fall in a seemingly endless procession before the fierce dragon of Nazism. The first country was sacrificed for " Peace in our time." The second fell because she was geographically unsuitable for active military assistance from us. The remainder were lost because they insisted on remaining neutral at a time when they might have been heavily fortified and prepared for active resistance. Finally, the war was driven right into our Allies' territory and the enemy pushed through our lines like a red-hot poker armed with flanks of steel. In spite of their vigorous and gallant defence, the French were driven to their knees and sought relief by armistice. Thus the British Isles form the last outpost of the old world democracies.

Our whole performance in the war so far may be compared to a carelessly-dressed child running down the street, now heaving at an unattached suspender, now pulling up a sock or tucking in a length of shoelace. The British soldiers have displayed great courage and ability whenever they have had the opportunity of doing so. The fact remains that the enemy's advance so far has not been due to success at detailed fighting ; whenever they came up against real opposition they simply withdrew and advanced through a weaker point. We have been out-manœuvred by clever scheming and accurately planned organisation. We have no partner in this struggle any longer ; the struggle is now our own and all the more worth winning. Taking stock, the situation can appear very favourable : on sea our superiority is unquestioned; in the air the Nazi fighter is no match for our well-trained pilots and soon their numerical stress will no longer exist. On land, when we can supply them with the necessary mechanical equipment, the spirit and courage of our troops will more than worry the enemy. The Germans, on the other hand, have mastered a vast amount of territory in an incredibly short time. It will take much longer to consolidate the affections of these conquered peoples, and until this is accomplished, large concentrations of troops must be scattered about to police these areas.

▭

A VERY far-sighted plan is the evacuation of children to the Dominions, and the advantages of this scheme are many. In the first place it takes them out of harm's way and will probably save many lives. Even if we discount the educational value that travel will afford the older children, the psychological worth of removing them from death and devastation must be appreciated. With the removal of a section of the population the problem of food supply to the nation becomes less pressing, and thus our fleet may concern itself with matters of a more military nature.

At first sight it would appear that this task of transatlantic evacuation is far too great at the present time when conditions are so grave. In point of fact if the scheme is properly organised, and it will be, those ships which are engaged in bringing men and supplies to us from abroad could be used for accommodating our children on the return voyage.

If, as a last eventuality, we are compelled to abandon this island and fight the war from the sea, the new and younger generation will have at least had the opportunity to grow up and mature in a relatively normal environment. Indeed they might even reinforce and bolster up the stock of the population in their respective localities

where a large percentage of the people are of Southern European extraction.

A NOT uncommon remark levelled at the house officer these days concerns his not being in uniform and taking his place in the services. The enemy's tactics up to now, and their preliminary air raids, more than indicate that total warfare is to be practised by the German invader. If this is so, then the house officer in the E.M.S. not only attends the civilian sick but, in addition, will be called upon to deal with both civilian and military casualties. As a result he undergoes the same risks as his uniformed colleague, receives less than half his salary and when permanently disabled he is not eligible for pension. So let this be the end of such blind criticism.

WOMEN and children refugees constitute the greatest menace to the smooth running of our defence movements in the heat of battle. Consequently, the Government has quite wisely started a scheme of evacuation into relatively safe districts in the country to avoid the confusion of fleeing hordes of civilians. Unfortunately many children are still seen playing in the borough streets and one cannot help feeling that perhaps stronger action might be taken by the authorities to influence parents to release their children for evacuation.

WE very much regret that "America Revisited," has again to be held over, it will certainly appear in the next issue.

Obituary

THOMAS GEORGE DOUGHTY BONAR, M.S.

THOMAS GEORGE DOUGHTY BONAR entered Guy's in 1914, qualifying in 1919, acquiring the M.B., B.S.(Lond.) in 1920, the M.D. in 1923, the M.S. and the F.R.C.S.(Ed.) in 1925. He was H.S. to Sir Alfred Fripp in 1919, Surgical Assistant and Demonstrator of Anatomy 1920 to 1922, Surgical Registrar and Demonstrator of Operative Surgery 1922 to 1925 and Obstetric and Gynæcological Registrar in 1925. Such was the training which tempered his inherent abilities and produced a surgeon of such versatility as to enable him to give service to Guy's in many different fields of his art. Though he left Guy's in 1925 to join the surgical staff of the Dreadnought, Evelina and other hospitals, the spiritual bonds with his old hospital were too strong to sever, and he retained a deep interest in everything connected with Guy's. By his death on June 15th Guy's has lost one of her best and one of her most typical products.

It is perhaps as a teacher and friend that one knew him best. In the former capacity he was brilliant. The simplicity of expression which reflected the lucidity of his thought, aided by the dry wit and charming gestures of an original personality, made him one of the most popular teachers of his time. As a coach he was sought after not only by "examinees," but by students who wished to acquire and retain the important principles of a subject, which often requires a great exponent to render them fruitful in the pupil.

As a friend he was incomparable. All his resources were at the disposal of those whom he regarded as friends. His surgical skill particularly was given with such generosity that was almost embarrassing. When one's friends or relatives required surgical attention it was to Tom Bonar that one naturally turned. Among the most grateful of his patients can be counted his own colleagues and their families, and that surely is the best measure of his skill as a surgeon and his sincerity as a friend.

In later years, he suffered from a duodenal ulcer, which on two occasions gave rise to an almost fatal hæmatemesis. In spite of this, he carried on an ever enlarging and successful practice with all the vigour and energy of his earlier days. He was warned to curtail his activities, but he was too attached to surgery to do so.

He fully enjoyed his moments of relaxation, too often cut short by an urgent call, to which he always responded with alacrity and keenness. His friends were amazed at the evident pleasure he displayed at the prospect of a "job of work," however congenial the company which he left.

At the outbreak of the present war, he joined the E.M.S. and was posted to the South Eastern Hospital in our sector, and more recently he was acting as mobile surgeon at Joyce Green. The work here provided an ample field for a surgeon of Bonar's versatility and called forth the spontaneous praise of those who witnessed it.

Yorkshire produced him; Guy's nurtured him. He represented the best qualities of both.

In extending our sympathy to his wife, herself an old Guy's Nurse, we know that she will be well content to share with Guy's its pride in her husband's achievements.

S. DE N.

Some Memories of Mr. Steward

"I am sorry to hear of Frankie's death," said a little old Guy's man of the turn of the century to me on Saturday last. "I was very fond of Frankie. No one ever disliked him." I think that summed him up. He was always Frankie to everyone. Perhaps in later years Frankie Steward, as befitted his seniority. "Of course, he could be rather frightening," my little old friend went on. "He came up to me in the dissecting-room—just fresh from school, I was—and he said, 'Look here, you! you've got to dissect, you have. You're not a chicken scratching in the back yard.' You see, I had him twice," he continued. "first in the dissecting-room and then, after he got on the staff, as surgical tutor when he took the revision classes in surgery. He always finished up by saying, 'Well! Good luck to you.—You'll need it!'"

When I came up in October, 1900, stories about him had already become traditional. These were about his extraordinary academic career. He was reputed to have got honours in every exam. and to have taken every prize he went in for. Above all, was the story of how he was ploughed in physiology in the primary fellowship, when four men that he had coached got through. I have often wondered if that was true. If it wasn't, it speaks all the more for him that at the age of 29 such stories were already being told about him.

I first met him in 1904, when I was Mr. Symond's ward clerk, and he, as assistant surgeon, used to come in at night time during take-in from Trinity Square, where he then lived. I cannot say I knew him then, nor a year later, as a dresser, by which time an R.S.O. had been appointed and Mr. A. R. Thompson had appeared in the Guy's firmament; but I had begun to learn from him. For two years I never missed one of his demonstrations on surgical pathology, which were held at 9 a.m. on, I think, Friday mornings. They were classes in morbid anatomy, illustrated by the museum specimens, and I copied the numbers of the specimens and scribbled rough notes, which I copied out later. I kept those notes for twenty years and have never since forgiven myself for destroying them. With all the increase of knowledge the application of pathology to the treatment of diseases of osseous tissue has not advanced much, if at all, since Frankie gave those classes.

But it was as throat-dresser that I really began to come under his influence. He had been made Clinical Assistant (corresponding to the present Chief Clinical Assistant, but without any pay) to Mr. Symonds in 1897, and had taken over the department when the latter became full surgeon in 1902. Throats were held on a Friday in a big room in O.P. that covered the space from sisters' room across the passage to the present Dispensary. There was a small room off it, where the clinical assistant (in my day, Mr. Philip Turner) sat with one dresser seeing children. In the big room were five seats for the five other dressers. We each took on the cases of a former dresser—I took on Mr. Davies-Colley's, who was three months ahead of me in the wards,—and stuck to them. It worked excellently. I have never been able to get my dressers to do it, and have always wondered why they won't do it for me, while we did it for Mr. Steward. I suppose it was personality, a subtle something, for he was "suaviter in modo," but "fortiter in re." We dressers used to go down at 11.30 a.m. and write up the new cases. Then go and have lunch and at 1.30 each would get a case into his own seat and Mr. Steward saw it with all the dressers, and so went on until he had seen and taught on all five. Then we carried out his instructions, got in five more cases, and started again. When the new cases were over we saw our old ones ourselves and he saw those that he wanted to keep an eye on. In those days it was not a compulsory appointment, it was the star of the voluntary jobs, most were qualified, and reading for the M.B., and sometimes the six throat dressers became the six next clinicals.

No one that qualified between the wars realises what "Clinical" meant when it was in the little, low building, where Shepherd's house now stands. The removal of certain bricks and mortar destroyed a tradition. It may be well to remember, in these days, that such is possible. It was the summer of 1906, with Laurie Shaw and John Fawcett. Frankie corresponded to both of them. We took in all sorts of cases of the medico-chirugical acute type and down came John and Frankie and we heard them talk them over. I cannot remember any specific teaching of these three months; but it was the approach to clinical medicine, the atmosphere, that mattered. Then three more years passed and I became his junior clinical assistant, and remained so until I succeeded him in the department, when Mr. Symonds went off and he became full surgeon.

Of all my teachers, that which I got from Mr. Steward has stood me in good stead better than that from any other. In principle and in detail

nearly all of it has lasted; but it has done more than that, for it has evolved as things have changed; so that one can apply what he taught to methods quite different from what he used. He was also the ablest of my teachers and colleagues. Two memories illustrate this. The late Mr. Jacobson in his last course of Clinical Lectures devoted one to internal derangement of the knee-joint. He mentioned a modification of the operation on the internal semi-lunar that Mr. Steward had recently practised; he did so with approval, but pointed out that it involved an increased difficulty and warned his hearers that but few had the hands of Mr. Steward. That was in 1904. In 1924 I was lunching with Sir Cooper Perry and in the course of conversation he said, "Of course, Steward is by far the ablest of all your colleagues"; and he was no bad judge. What did he mean by ability? I think he meant the power to do anything well without apparent effort. With Mr. Steward this want of effort was not only apparent it was real. I do not mean by that that he did not exert himself. When he was faced with any problem he would put out all his powers. I mean that he did not consciously feel that anything was difficult or that he might not be capable to deal with it. More than once I have said to him that I found such a thing difficult, and he answered, "Oh? I haven't found it so." I think such men fall short of being the best undergraduate teachers for that very reason. They do not find a thing difficult and so do not realise that others may. I once said I found it hard to see things in a larynx; he answered, "Oh! I don't know that I find it hard to see things; I find it very hard at times to interpret what I see." A subtle distinction that goes to the root of clinical laryngology.

He was the best rhinologist I have known, and was only equalled by one. He taught broad, general principles that hold good until to-day. They were so sound that much of the recent advances seem reactionary to a Guy's man. He always kept before us an idea that does not seem to be taught in other schools. It is that for the efficient physiology of the upper respiratory tract a due proportion is needed between the cross-section of the airway and the area of the mucous membrane in relation with it. The applications of this principle are manifold, the neglect of it may be devastating to the comfort and the welfare of the patient. His memory of rare and occasional appearances of the pharynx and larynx was uncanny. Though after 1912 he no longer practised in the speciality, his opinion on these remained better than those of his seniors who had always been at it. I remember a case that Dr. Beddard got me to see that I could not make head or tail of. Mr. Steward saw it and said he thought it was malignant disease implanted on a syphilitic lesion. I took him up to the Laryngological Society and showed it to all the leading men of that day. They all gave different opinions that I made notes of and reported them to Dr. Beddard. He had my letter pasted in the report, and each time he went round he took it down and read these out while hooting with laughter. In Gibbs' department Mr. Steward was proved to be the only one that was right.

Mr. Steward was the true general surgeon, and he was a capable exponent on all parts of the body; but also in every part he based his surgery upon general principles. He was never tempted to be led away by anything that might redound to his own honour and glory rather than to the good of the patient.

But it was not only in surgery that he made his influence felt at Guy's. He was one of the most valuable committee men we have ever had. Students, present and past, do not appreciate how much such an institution owes to those who give their time to the committees upon which its existence depends. The fact that Mr. Steward was put upon so many committees shows that he had the confidence of his colleagues as a whole. The fact that he was appointed chairman of most of them showed that he had the confidence of that inner ring to whom the majority confided their powers. He was at one time Chairman of the Medical Committee, Chairman of the School Council, and Chairman of the Finance Committee of the School, and the first entailed his also being a member of the Staff and School Committee of the Governors. At all of these he seldom missed a meeting, and while there exerted his full influence every time. This was not obtained merely by his ability, assiduity was as important. At the end of the meeting you did not see him scuttle his papers on the table. He picked them up, placed them into their envelope and this he put in his inside breast pocket. When he got home he kept them and must have kept them carefully, because whenever an old point turned up in a new agenda he had referred to the old documents about it before he came to the meeting.

By constitution his mind was conservative, but not reactionary. Whether in surgery, or in school and hospital affairs, he did not rush at the new ideas, but he always considered them. And being persuaded that they must be taken up, he went about putting them into practice cautiously and slowly, after having learned all he

could about them first, and watching the progress carefully in its initial stages.

He was at Guy's in the first thirty years of this century what Mr. Arthur Durham was in the final thirty years of the last, a man who profoundly influenced surgery in its widest aspect, not by what he wrote, nor by any new ideas that he produced, but by the way in which he guided the men of a great school who have gone out into all the world passing on, consciously and unconsciously, what they learnt from him.

T. B. L.

Some Methods of Oxygen Administration—Essential Data

By N. Mutch, Esq., M.D.

CYLINDER CAPACITY AND CONTROL

THE large 100 cubic foot cylinder which with its complement of valves and gauges stands almost 5 ft. high and contains oxygen under great pressure (1,800 lb. per square inch) is an impressive piece of equipment. Instinctively one feels that the gas from two or three such cylinders would quickly fill a room. Unfortunately the impression is an erroneous one. Each cylinder contains only sufficient oxygen to fill a small corner of a small room and form just a shallow layer one foot thick spread over an area measuring 10 ft. square. The smaller cylinder in common use—the 20 cubic foot cylinder—does not provide for even a cube with a 3 ft. edge, and contains scarcely sufficient oxygen for the preliminary filling of a small oxygen tent. The administration of oxygen must therefore be carefully controlled if the patients are to receive therapeutically effective doses from the limited supplies usually available.

Oxygen companies fit each cylinder with an outlet cock and external to it, a hollow seating into which a fine adjustment valve can be screwed. This valve and the key to operate the cock are provided by the user. More elaborate devices carrying gauges, pressure reducing mechanisms, injectors, etc., may be attached, but a fine adjustment valve is always included in such cylinder headings and the valve represents the indispensable unit without which regulation of outflow is impossible. The seating must be cleaned out carefully before the valve is screwed home. Neglect of this elementary precaution quickly ruins the mechanism. The valves at many hospitals bear the scars of such abuse.

The amount of oxygen remaining in a cylinder can be determined by means of a pressure gauge. This dial instrument may be marked in any one of three different ways. The readings may be conveniently marked " half full," " quarter full," etc., or they may indicate the pressure in atmospheres or in pounds per square inch. The gas in a full cylinder is under a pressure of 120 atmospheres (or 1,800 lb. per square inch—15 lb. =1 atmos). The pressure and the volume of oxygen remaining vary *pari passu*. Thus at 60 atmospheres half of the gas remains, at 30 atmospheres a quarter remains, and so forth.

Oxygen is usually prescribed in terms of litres per minute. Common rates of flow vary from $\frac{1}{2}$ litre for an infant with intranasal catheters to 10 litres for an adult in a tent. To convert litres to cubic feet multiply by 30. More accurately the conversion factor is 28.3, which even to the first decimal place is identical with the conversion factor from cubic centimetres to ounces. It is easy to calculate from these data that for a mean flow of 6 litres per minute, 3 large 100 cubic feet cylinders will be needed per 24 hours. It needs little reflection to realise the magnitude of the supplies problem inseparable from continuous oxygen therapy and the futility of trying to use one small 20 cubic feet cylinder to serve several patients.

METHODS OF ADMINISTRATION

1. *Tube and Funnel.*—It is recognised that any improvement observed in the patient's clinical condition during the administration of oxygen by this means is attributable to reflex action from the cool draughts playing on his face and to the psychological effect of the noise made by the escaping jet of gas. Analyses of alveolar air fail to show any measurable rise in its oxygen content.

2. *Nasal Catheters.*—A No. 9 catheter with additional perforations is smeared with vaseline and gently inserted through the nares for a distance of about 3 inches until the tip reaches the nasopharynx. A similar intubation is carried out on the other side. The two catheters, joined by a Y piece, are connected suitably to the oxygen cylinder. The tubes can be kept in situ by a piece of strapping fixing them to the forehead, or by some form of head band or spectacle frame. Head bands and bandages tend to produce headache by interfering with the venous return from the scalp. To obviate this difficulty the Tudor-

Edward spectacle frame was devised (Fig. 1). The tubes A A are connected by a Y piece conveniently remote from the patient and so to the cylinder. To the outlets B B are attached the nasal tubes which can be cut from No. 9 catheters or from ordinary bicycle valve tubing, which is softer and more comfortable in the nose and definitely the tube of election. Bicycle valve tubing can be purchased cheaply by the yard from any small bicycle dealer. This method, however, is not so simple or so inexpensive as it might appear to be, because two other pieces of apparatus are essential, namely a washbottle to humidify the oxygen and so prevent the complete drying out of the nasopharynx, and a flowmetre. At the end of the nasal tubes the oxygen escapes in a slightly disruptive jet and with increasing rate of flow a limit is soon reached beyond which further increments cannot be made without causing intolerable pain. This critical rate is about 4 litres per minute. At rates substantially below this value the therapeutic effects are unsatisfactory. A flowmetre is therefore needed to ensure that the rate shall approach the figure, but not exceed it greatly. If the bobbin type of flowmetre (a familiar feature of the gas and oxygen anaesthetic apparatus) is used or one of dial type, a washbottle must be connected in series. A third type of flowmetre combines the two functions of measurement and humidification. It resembles a washbottle with a special marking for the water level. The lower end of the inflow tube is blocked and the oxygen escapes into the water through a series of lateral perforations. With slow rates of flow only the most superficial hole is in operation. As the rate is increased more and more holes come into use. The number of holes which are actively passing the gas is noted and the rate of flow then determined by reference to the calibrated scale provided.

By this method the concentration of oxygen in the alveolar air can be approximately doubled. The normal value is about 15 per cent. With intranasal administration it rises to the order of 30 per cent. One serious disadvantage is that the system is a ration system. No matter how great the ventilation rate may be, 4 litres of oxygen is the most that can be provided and of this about one half is wasted during the expiratory phase. An average normal man at rest requires about 6 litres of air per minute. The nasal tubes can only give him 2 litres of oxygen. The balance must be made up from the atmosphere. The mixture is further degraded during inspiration by contamination with the tidal air. When the ventilation rate increases the dilution with air is greater and the rise in alveolar oxygen tension secured by nasal catheters is less. Many factors may lead to increased ventilation. Even a small rise in temperature will raise the figure to 10 litres per minute. It is a most unfortunate circumstance that for this reason, the greater the patient's need the lower will be the oxygen pressure in his alveoli. To overcome the difficulty, ration schemes must be discarded in favour of those based on the principle of demand and supply. The oxygen tent conforms to this require-

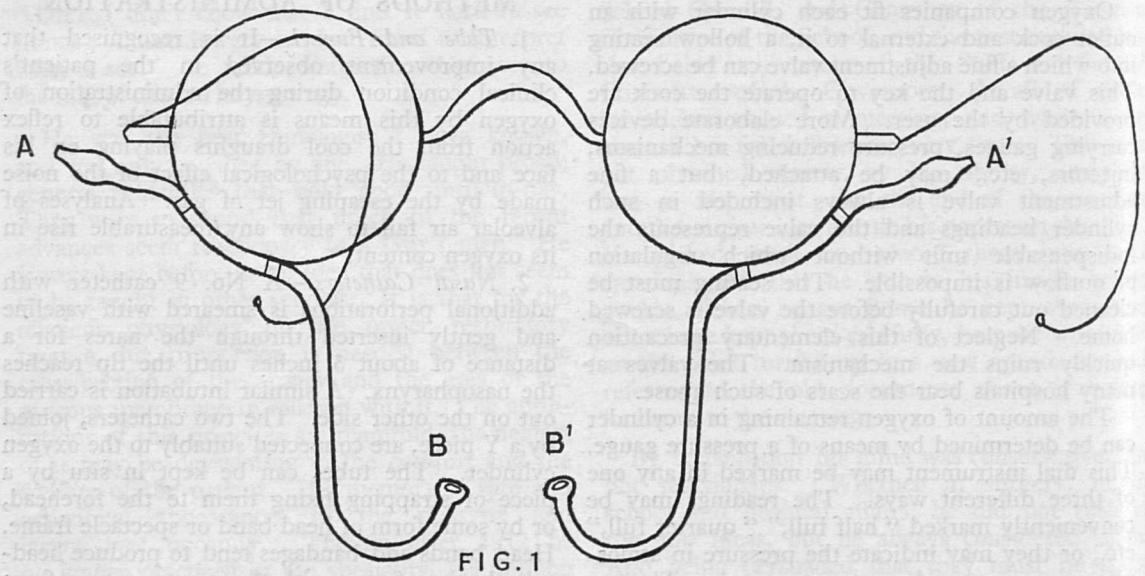

FIG. 1

TUDOR-EDWARDS SPECTACLE FRAME.

ment and provides adequately for the full range of clinical ventilation rates.

3. *Oxygen Tents.*—It is not proposed to give details of these relatively elaborate outfits. They are costly to purchase and to service, but give excellent therapeutic results. With average care the alveolar oxygen can be kept at 45 per cent. and when the patient can be left in his tent undisturbed the figure may rise to 60 per cent. If he requires much nursing attention only the lower values can be attained.

4. *B.L.B. Mask.*—This device also enables oxygen to be regulated to demand rather than limited to a fixed ration and with its assistance alveolar concentrations of 90 per cent. oxygen or more are easily secured. Fig. 2 shows the essential features. The nose piece A modelled in latex rubber is held snugly to the face by a light rubber band K passing round the head at the level of the ear. In this position the band does not occasion any headache. The mask is connected by the wide airways B B to the tubular metal connecting unit C and so to the bag D into which oxygen is led through the nipple E. This inlet E is joined by ordinary tubing to an oxygen cylinder. No other equipment is needed beyond the usual fine adjustment valve fixed into the top of the cylinder. As indicated by the dotted lines, the inlet tube passes almost to the bottom of the bag the capacity of which is about 800 cc., a volume conveniently larger than that required for one inspiration. The rate of oxygen flow is so adjusted that a little gas is left in the bag at the end of inspiration. If much remains, wastage will occur and if any remain at all, even a few cubic centimetres, the patient will feel perfectly content. During expiration oxygen collects in the bag and does not leak into the general atmosphere as is the case when nasal catheters are employed. The expired air escapes through the outlet valve F, controlled by a spring so lightly loaded that the valve can open and shut without the patient's being aware of the need of any additional effort. The superbly easy action of this valve contributes greatly to the utility of the apparatus.

Another important feature is the accessibility of the patient's mouth for feeding, drug administration, cleansing, vomiting, expectoration, etc. One naturally wonders how far the opening of the mouth interferes with the artificial oxygenation of the lungs. It has been found that a normal individual cannot avoid taking in a substantial proportion of air through the nose even when attempting to breathe solely through the mouth. The slightly positive pressure inside the mask is for this reason sufficient to ensure an alveolar

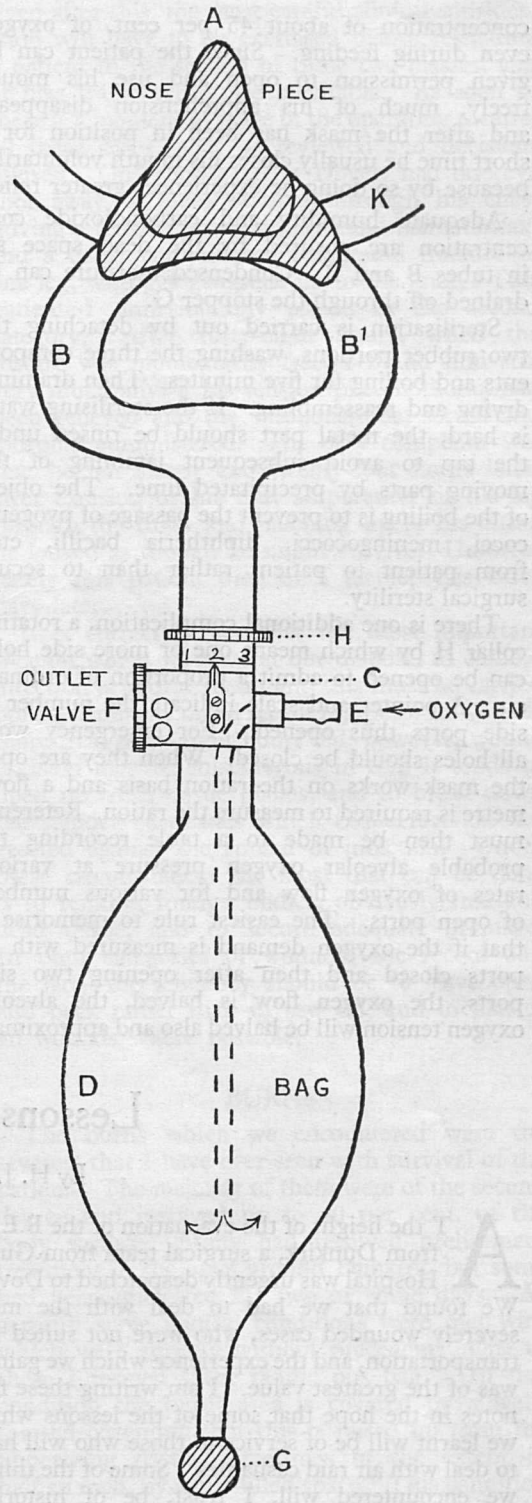

FIG. 2
B. L. B MASK

concentration of about 45 per cent. of oxygen even during feeding. Since the patient can be given permission to open and use his mouth freely, much of his apprehension disappears and after the mask has been in position for a short time he usually closes his mouth voluntarily, because by so doing he experiences greater relief.

Adequate humidity and carbondioxide concentration are ensured by the dead space air in tubes B and B. Condensed moisture can be drained off through the stopper G.

Sterilisation is carried out by detaching the two rubber portions, washing the three components and boiling for five minutes. Then draining, drying and reassembling. If the sterilising water is hard, the metal part should be rinsed under the tap to avoid subsequent jamming of the moving parts by precipitated lime. The object of the boiling is to prevent the passage of pyogenic cocci, meningococci, diphtheria bacilli, etc., from patient to patient rather than to secure surgical sterility.

There is one additional complication, a rotating collar H by which means one or more side holes can be opened to admit a proportion of ordinary air. A pointer and scale indicate the number of side ports thus opened. For emergency work all holes should be closed. When they are open the mask works on the ration basis and a flowmetre is required to measure the ration. Reference must then be made to a table recording the probable alveolar oxygen pressure at various rates of oxygen flow and for various numbers of open ports. The easiest rule to memorise is that if the oxygen demand is measured with all ports closed and then after opening two side ports, the oxygen flow is halved, the alveolar oxygen tension will be halved also and approximate 45 per cent. In this way additional expenditure on a flowmetre oxygen supplies can be conserved and a reasonable amount of oxygen still furnished to the alveoli. Hitherto 90 per cent. alveolar oxygen tensions have not been attainable under clinical conditions and the limits of their utility have still to be determined. Practical observations seem to show that the old belief that the lung endothelium is damaged when subjected to concentrations above 60 per cent. and for longer periods than 18 hours can safely be ignored. In America 90 per cent. oxygen therapy has been kept up continuously for several days without clinical evidence of injury.

Special war indications are for the treatment of chest injuries, respiratory paralysis, obstructed airways, acute irritant or asphyxial gas poisoning and secondary shock following mechanical injury or burns.

TABULATED DATA (Approximate)

Multiples of 15 :—

15=Alveolar oxygen percentage—
Normal and conversion factor from atmospheres to lbs. per square inch.

30=Alveolar oxygen percentage—
Nasal catheters and conversion factor from cubic ft. to litres.

45=Alveolar oxygen percentage—
Tent (usual).

60=Alveolar oxygen percentage—
Tent (extreme).

90=Alveolar oxygen percentage—
B.L.B. Mask.

120=Pressure of oxygen in full cylinder—
Measured in atmospheres.

(Cylinder capacities 20 cubic feet and 100 cubic respectively.)

Lessons from Dover

By H. J. B. Atkins, Esq.

AT the height of the evacuation of the B.E.F. from Dunkirk, a surgical team from Guy's Hospital was urgently despatched to Dover. We found that we had to deal with the most severely wounded cases, who were not suited for transportation, and the experience which we gained was of the greatest value. I am writing these few notes in the hope that some of the lessons which we learnt will be of service to those who will have to deal with air raid casualties. Some of the things we encountered will, I trust, be of historical interest only, and amongst these I hope to include the treatment of severely wounded men who had been unattended for as long as six days ; but many of our experiences will be repeated in dealing with the injuries liable to be met with after air raids upon the civilian population.

From the first, it was apparent that there was urgent need for students who had had eighteen months or more of clinical experience. It should be the duty of such students to familiarise themselves with the precise technique of blood transfusion and blood grouping. They should be thoroughly conversant with all the available and effective methods of oxygen administration, and should know, for each apparatus, the volume to

be delivered per minute in order to establish a satisfactory alveolar air oxygenation. A knowledge of the Ministry of Health publication on oxygen administration (E.M.S./Gen./312) is adequate for this purpose. In addition to blood transfusion, students will be called upon to give intravenous M. and B., pentothal, glucose, saline and gum solutions; as a result they should seize every opportunity of exercising their skill with the intravenous needle. They will be required to pass catheters, wash out stomachs and to operate upon minor casualties. Attention is drawn particularly to the short pamphlet on "Preliminary Treatment of Head Injuries," issued by Professor Johnston. The exact indications for, and dosage of the sulphonamide group of drugs must be known ("Guidance on the Use of the Sulphonamide Derivatives," issued by the Ministry of Health), and the details of fixed and movable extensions of fractures, clearly understood.

Upon the House Officers, perhaps the greatest responsibilities will rest. In addition to the pamphlets mentioned above, the following should be carefully studied:—

M.O.H. Memorandum on Chest Injuries, by Tudor Edwards (E.M.S./Gen./326).

M.O.H. Memorandum on Spinal Injuries (E.M.S./Gen./314).

M.O.H. Memorandum on Burns, by Professor Wilson.

In regard to the memorandum on Chest Injuries, page 1, paragraph 1 should obviously read "there is *now* evidence to suggest," etc.

In the memorandum on Burns the statement that "the hæmoglobin content of the capillary blood . . . is estimated several times daily for several days" and other similar professional exhortations must not be allowed to detract from the mass of valuable information which this paper contains.

Our experiences at Dover enabled us to make some general observations with regard to the conduct of a casualty clearing station under conditions of emergency. We attempted to divide cases into two classes: those for whom something could be done, and those for whom nothing could be done. When all available operating equipment is functioning for twenty-four hours a day it is one's duty to deny the help of operative treatment to a proportion of the patients admitted, in order that those for whom there is more hope may have the benefit of the available services. The division of patients into two classes should never be made until after the classical methods of shock treatment have been routinely carried out. Patients apparently on the point of dissolution will respond miraculously to warmth, morphia and transfusion. Even after this, the most careful clinical consideration will have to be exercised before relegating a patient to the second of these two classes, and at first tragic errors are inevitable. As soon as there is a moment to spare in the operating theatre, all these cases must be reviewed and decisions revised. One such case, at Dover, had one eye shot away, a piece of shell through his chest (giving a tension pneumothorax and hæmothorax) and a badly comminuted compound fracture of one leg, with gas gangrene up to the knee. This patient I unhesitatingly placed in the second category. After forty-eight hours, when the theatre was momentarily free, I found him still very much alive; his tension pneumothorax had been relieved and the sulphonamide, serum and morphia administered. His only complaint was that he felt sleepy and twenty-four hours later, after excision of his eye, amputation of his leg through the thigh and patching up of his chest, he looked as though he might survive. Unfortunately this patient died of a hæmoptysis three days later.

It is correct to say that the most important weapon which we have at our disposal to combat infection is débridement, and this must be carried out meticulously on all recent injuries. In wounds more than forty-eight hours old, however, wound excision may be mischievous in that it tends to open up fresh tissue planes, and to break down the slender barricades which tissue reaction has erected against the spread of infection. Under these circumstances the most that can be done is to remove, foreign bodies, obviously free and dead tissue, and to secure adequate drainage. In both categories of wounds—the recent and the late—the tendency should be to leave open and pack rather than to sew up, and to plaster all wounds where possible.

BURNS

The burns which we encountered were the severest that I have ever seen with survival of the patient. The majority of them were of the second degree and involved up to 40 per cent. of the body surface. Many had received preliminary treatment in the open around Dunkirk, but some had been untreated for two or three days. As a result some clinical conditions were met with which were entirely without precedent. One of these I termed "the tannic pus bag." In this condition the burnt area is covered by a well-formed coagulum, but this is raised up from the underlying tissue, sometimes to the extent of half an inch, by a pus-filled space. This condition is treated along the general lines indicated in the memorandum on burns, with intravenous glucose,

sulphonamide and suprarenal cortical extract, but the problem is what to do with the local condition. Removal of the coagulum and daily dressings are advised by Wilson, but this is only practicable when the burns are of moderate extent and is in any case very troublesome for the patient. A naval surgeon with whom we discussed the matter advised leaving the coagulum alone, thus practising a modified Winnett Orr technique. He said that the toxæmia gradually lessened and the pus beneath the coagulum became sterile. This we found to be the most satisfactory method. Where the coagulum is tending to separate, two methods of treatment are available: (1) to apply tannic jelly in an endeavour to form a fresh coagulum or (2) to remove the coagulum and, either dress daily or encase the part in plaster. We did not have an opportunity of assessing the respective values of these methods.

In dealing with burns of the fingers and hands we had great difficulty in preventing contractures. Application of splints at the time of tanning tended to interfere with coagulation and the best policy was to wait twenty-four hours for the coagulum to set and then to apply splintage under pentothal anæsthesia.

The method of coagulation of burnt surfaces employed was that advocated in the M.O.H. report; 5 per cent. silver nitrate followed by 20 per cent. tannic acid was found to be the best coagulating agent.

ABDOMINAL CONCUSSION

Three interesting cases of abdominal concussion came under our care. These patients were swimming in the water after their vessel had been sunk by a submarine, when depth charges were dropped by a warship near by. These three men were eventually rescued and brought into hospital each with evidence of general peritonitis. At operation, one was found to have a perforation of the ileum three inches from the ileo-cæcal junction, one had a perforation of the first part of the ascending colon, and the third was found to have multiple petechial hæmorrhages into, and œdema of the walls of, the intestine, but no definite perforation was present. The first two of these patients were well on the way to recovery by the time of our departure, but the third, the case without obvious perforation, was moribund. This is in keeping with the accepted prognosis of these injuries; it is those cases with definite perforation for whom the outlook is more favourable. In general, however, the prognosis is not good since all are liable to succumb to petechial hæmorrhages and lacerations in the brain and lungs, and rupture of the pulmonary alveoli.

The patient without rupture of the intestines was dying from a confluent bronchopneumonia. This may well have followed his long immersion, but pulmonary damage from the explosion cannot be excluded. The patient with a perforation of his ascending colon went into deep coma thirty-six hours after his operation. Although his peritonitis had been mastered, he now presented the symptoms and signs of cerebral contusion and I have little doubt but that in this case, there were changes in the brain similar to those observed in the intestines of the patient who was dying. I have heard recently that this patient is progressing favourably.

The intestinal perforations in both our cases were adjacent to the ileo-cæcal valve and this is said to be the commonest site of occurrence. Other fixed regions of the intestine such as the duodenum and the duodeno-jejunal junction are just as important sites for rupture accompanying this type of violence as they are for rupture following crush injuries of the abdomen.

The damage to the intestine may consist of a single puncture, as in the cases which we dealt with, there may be multiple perforations, or the intestine may be torn completely across. The liver and spleen are sometimes ruptured as well.

Treatment is first directed towards overcoming shock. Intra-abdominal lesions are dealt with according to general principles and oxygen may be required for pulmonary complications. In the case which presented a picture of cerebral contusion we gave 50 cc. of 30 per cent. glucose intravenously at a time when the patient showed a tendency to irritability, but this had no beneficial effect.

This irritability, which was never marked, was the only evidence of raised intracranial pressure. At no time did the patient vomit and his pulse rate and blood pressure kept within normal limits. Masterly inactivity seemed the wisest course to adopt.

WOUND INFECTIONS

The wound infections which we encountered were of the grestest interest, and we wished we could have kept some of these cases longer, from the point of view of following up our initial observations.

Many problems presented themselves to us and are as yet unsolved. In every case where gas gangrene was present the wound exuded a characteristic smell, but many wounds gave forth this odour when there was no clinical evidence of gas. In this regard bacteriological investigation of these wounds would have been of the greatest value in determining whether infection with gas-forming organisms had taken place but was subclinical in extent.

The detection of gas in the tissue planes requires a little practice. Some cases yielded evidence of crepitation on firm pressure, others on light touch. I found that pressure with the stethoscope caused a characteristic fremitus on auscultation which was more readily obtained in a doubtful case than the crepitation on palpation. X-ray examination, if there is time, will confirm the physical signs of gas. The possibility of a recently sutured and uninfected wound giving these signs owing to included interstitial air must also be borne in mind.

The prognosis of gas gangrene infection treated with massive doses of antiserum and sulphonamide has still to be determined. Our impression was that such cases did not show the enormous mortality that harrowing tales from the last war had led us to expect. These measures certainly do not obviate the necessity for guillotine amputation and the excision of muscles for this infection.

Two cases developed infection with the Bacillus Pyocynæus, as evidenced by the sea-green pus and the characteristic odour, which was quite different from that of the gas-infected wounds. The appearance of the B. Pyocynæus is said to be of favourable prognostic significance in that these bacilli inhibit the growth of other and more pathogenic organisms. The B. Pyocynæus can itself readily be exorcised with 2 per cent. acetic acid or household vinegar. Certainly the two cases which we had, one of whom had the muscles and bones about the shoulder joint badly shattered and infected, appeared to be progressing favourably.

The value of the very careful and gentle handling of seriously wounded men cannot be overestimated. This factor is stressed by everyone who has had experience with casualty work. The life of many a casualty hangs by a slender thread which a careless tug will snap. In addition, the sure and steady movements of trained stretcher-bearers does much to save additional suffering to men already burdened with a full load of pain.

Sector News

Guy's Letter

THIS last fortnight has been, on the surface, one of peace and quiet at Guy's. There has been no Nurses' Dance nor other entertainment to enliven us, and it has been too hot and close for squash. We have not been lazy, however, and our wards are now nearly full again. Real experience has yet to come, but many full scale rehearsals of our emergency organisation have been carried out with enthusiasm and efficiency. The anti-fire squad have added yet another to the noises that disturb us at night. They did not really sound like cats, but at least one sister was with difficulty restrained from emptying a water jug on to what she judged to be her favourite pest.

On account of examinations at Cambridge, Professor Ryle was unable to visit us last week. Sir Arthur Hurst is continuing his Combined Rounds and we were, on the occasion before last, favoured with a presentation of his instructive cinematograph film dealing with War Neuroses and their treatment. The honorary staff are maintaining their clinical lectures with commendable regularity.

H. P. Guerrier has joined the Residents, taking the place of W. B. D. Maile, who becomes R.M.O. at Nuffield House. Our most momentous feature has, however, been the retirement of our President, J. R. E. Stoneham. His re-election by an almost unanimous vote is a fitting tribute not only to his seniority, but also to his ceaseless and untiring application to all our petty troubles.—N. A. N.

Pembury Letter

THE staggering events of recent weeks have had repercussions on us at Pembury. As we intimated in our last letter, changes are to be made here, but their exact nature we cannot indicate for the simple reason that we have no authoritative information, and, even if we had, we doubt whether it would be politic to disclose it. However, we can say that Mr. Chapple, Mr. Lambrinuidi, Babrow, Cooper and Douglas have left us, and that Mr. Turner is soon to depart. To all of them we wish the best of luck, and we are sorrowful to see them go.

Anyone who has read these letters must have realised that Pembury has been the greatest success the E.M.S. could have achieved. Our staff, whether Guy's, K.C.C. or other E.M.S. personnel, have worked together with such co-operation and friendliness that no friction has ever been known. We have been one happy family, and when we were called upon to deal with out part of the war casualties, this co-operation led to a standard of excellence in our work that could not have been surpassed anywhere. We looked forward to continuing this association, but it is not to be. May we be permitted for once to use this "Letter" to express to those who have gone our personal thanks for the help and happiness they have rendered to Pembury. We make no attempt to conceal that this is a sad time for us; but, in view of what has happened in the outside world, it is but as a grain of sand on the seashore.

Last week the Guy's Nurses and Students Social Club gave a delightful picnic party at the local swimming pool. Those who do not know Pembury would have been gratified to see how staff, students, sisters and nurses mixed to make a democratic party. We certainly enjoyed ourselves.

Postscripts are now the order of the day, ranging from " My Bruvver's Letter " to the Nine O'clock News. Here is ours :—

We unfortunately omitted to mention in our last epistle the terrific performance of our theatre staff in dealing with the Dunkirk casualties. Whatever hours the work went on, the same efficiency and courtesy was there. We congratulate the ladies concerned.

N. M. J.

Orpington Letter

THIS letter is, of necessity, written a full week before publication, and the relative calm which has settled over us once again may have been rudely shattered by the time this is read. Our convoy of wounded have been almost entirely dealt with, and very nearly without exception are making good progress. In particular many of the cases of burns are emerging from behind their tan with complexions as soft and pink as the proverbial baby's buttocks. One of our Moroccans with a face more villainous than Hollywood's best is causing great amusement by parading through the village dragging behind him a wooden Dismal Desmond complete with wagging tail and flapping feet.

During the past week, through the generosity of the Commodore Theatre at Orpington, collections have been made daily in aid of comforts for the troops. Sister Marriott, Dr. Campbell and Dr. Scott have each braved the footlights to make personal appeals. Amongst other gifts which are being showered upon us is a daily bottle of goat's milk, which we hear is eagerly lapped up by the Moroccans.

We would like to congratulate Sister Randall on her recovery after having her appendix rudely snatched from her, and we hope soon to see her back amongst us again.

In conclusion we are very glad to welcome Eve, who has come to join us from Farnborough.

A. T. M. R.

Correspondence

To the Editor of the GAZETTE

SIR,—I am asking you to publish two letters from me in reply to " Student's " letter in the last issue of the GAZETTE. The first was written on the night of Wednesday, June 12th, immediately after reading " Student's " observations in page-proof in my capacity of Acting Censor of the GAZETTE. I asked you if you could possibly arrange to have it published side by side with " Student's " letter in the last issue, but owing to technical difficulties the publishers were unable to do this. The first letter is as follows :—

" Student's " letter deals with matters of such importance and urgency that I am asking you to allow me to avail myself of the opportunity I possess of reading the page-proofs of each number of the GAZETTE to arrange for the inclusion of this answer to his letter in the present, rather than in the next, issue. He has chosen for his text, rather diffidently, a quotation from " Passim " that " criticism is seldom constructive," but he has expressed an admirably constructive sentiment. He has expressed a feeling which we are all experiencing at the present time. In these nine months of inactivity we have all of us been condemned to carry on with our singularly unspectacular duties. The student has been told that he can best serve his country by ensuring that he becomes a qualified doctor in the shortest possible time. The house officer has been asked to think only of his duty to the civilian sick, and has been hampered by various unavoidable restrictions as to the number and type of cases he can admit. The junior staff have been asked to stay at their hospital posts to work harder than they have ever done before in order to treat the very large number of out-patients as well as to teach more and keener students. The members of the senior staff, now considerably depleted in number, have done most valuable and valiant work in putting in many extra hours at out-patients, rounds and lectures. And yet we all feel we are not doing enough. We feel, rather uneasily, and this feeling is clearly expressed by your correspondent's references to complacency, that there must be a lot more that we could do here at Guy's.

I frankly confess that this feeling has haunted me for many months. But what more can we do ? May I air my views in the hope that it will stimulate others to come forward with suggestions ? First, let us pool our ideas. I would welcome anyone who would come to discuss with me any concrete and constructive scheme which would

help me to ensure that I have not " left undone those things which I ought to have done." Secondly, let me explain my policy in regard to the use of Air Raid Volunteers. Guy's has a very fluctuating population. Some of us are resident, some of us have clearly defined duties to perform in connection with the reception and treatment of air raid casualties. Most of us are not resident but might be in the Hospital when an air raid takes place. If we are we would like to feel that we are being of some use. It is for those of us in this category that I compiled a list of volunteer air raid duties—a list which I felt was not wholly satisfactory because if everyone turned up there would be more helpers than patients. But if air raids or other similar horrors come they will not come singly but in waves which may last not for hours but for days. It is, therefore, important to have reserves and I hope no one will feel offended if he or she is told to go away and report for duty in—say—six hours' time. If your name is on that list and you are really keen to do your bit, go and badger the officer-in-charge of that unit and the sister-in-charge of the ward or department until you are satisfied that you, personally, know exactly what you are expected to do, and if you get no satisfaction from them come and badger me *before* but not *during* or *immediately after* the first air raid.

Probably the most important principle of efficiency when one is dealing with the unknown—as we are to a large extent—is flexibility, so not only don't be surprised if you are taken away, say, from giving anæsthetics to act as runners, stretcher bearers, gas decontaminators, even makers of beds or tea. Not only don't be surprised but be prepared. In the immediate future practices of all kinds—stretcher bearing, reception room, resuscitation, gas decontamination, fire fighting—will be held and advertised. Come to them if you are sufficiently keen. Finally, if you are the sort of person you feel I can rely upon to be there when anything happens, or if you are determined to get to the Hospital as soon as you possibly can after an air raid, come and see me again, but come to me with some definite idea of what you primarily want to do, and a willingness to make yourself efficient at any of the secondary tasks you might be called upon to execute. I can then make a list of those people on whom I can certainly depend, and another list of those who are willing to do what they can if they happen to be around.

Thirdly, I have felt for some time that there should be some work of national importance that we at Guy's could undertake in our spare time. Including nurses, students, patients and others there are more than 1,000 of us here each day. Surely we could spare one or two hours a day to work at a lathe, to sew material for balloons, to knit, to do something, anything we can get to do, to further the war effort. We have already got work to occupy a few of us who are skilled engineers, but that is only a beginning. I am getting in touch with everyone I know in the various Ministries of Labour, Supply, Economic Warfare and Aircraft Production to see if we can't get more to do. If you know of anyone who might help us to get work of any sort come and tell me.

Finally, having made our plans, and I am inviting you to make them *our* plans and not *my* plans, don't let us be complacent; let us re-examine those plans from day to day, and from week to week. On the other hand, don't let us be jitterbugs. Let us remember that Guy's as a casualty clearing hospital was organised in broad principle and to a great extent in valuable detail as long as 18 months ago by our Group Officer, Professor Johnston, and his advisers, and when the air raids do come they will be a relief from our uncomfortable inactivity and will provide a chance for us to justify our existence and show that we are prepared.

The second letter is written on Sunday, June 23rd :—

Since the first letter was written further contacts have been made with firms of engineers in an attempt to obtain mechanical work of national importance which might be undertaken on the lathes of the Hospital and School. So far two highly technical jobs have been obtained in this way and are occupying all the spare time of three skilled mechanics resident in the Hospital. We have promise of further work of a similar nature and we are satisfied that we can keep any sufficiently skilled mechanical technician employed in as much spare time as he can give us for the rest of the war. But this is work which is suitable for only very few of us. Other types of less skilful mechanical work are not easy to obtain. Two factors are against the employment of labour in such an institution as Guy's on unskilled mechanical work—mass production and transport. Most of the unskilled work is done by mass production methods in factories specially equipped for such processes, and it would be uneconomical to transfer part of such jobs to our lathes. Furthermore, the cost of and time wasted in transport of parts for " roughing " or other treatment makes this sort of work impracticable in the Hospital workshops.

With regard to other forms of war work, I have written to a number of organisations such

as the W.V.S. asking for work or suggestions, and I am hoping that by the time this letter appears in print that work which can be done by the unskilled man or woman will be available for us.

Your correspondent concludes with the following words: "May I say that we will willingly follow any course of action or inaction as may be directed, but that inaction comes very hard to able-bodied young men at times like this, unless we are convinced that there is no active help we can give." It was that sentiment which I found so encouraging. But in the last week I have been dismayed to find that sentiment is more theoretical than practical. May I give two examples? Two full-dress air raid practices have been staged—one at 5.30 on a Wednesday, the other at 11.30 a.m. on a Sunday. Very few of the volunteers belonging to the teams involved, who live out of the Hospital, attended the Sunday practice, and the attendance at the Wednesday practice could have been improved on. Now, these practices are designed to make us efficient by familiarising ourselves with the procedure involved. If we are not familiar with the procedure we will be almost useless in a real air raid. I do not want people who will come and "lend a hand," but I want really well-trained workers. It is the spirit of "lending a hand" which is so typical of democratic nations and which is so very dangerous when one is fighting a nation of professionals. There is the feeling among some of our volunteers here that they don't need to attend the practices because we can rely on them to turn up when the real thing happens; but they do not realise they will be only amateurs then, and the more amateurs we have when the real thing happens the less professional will be our method of coping with it.

The second example is the response to a call for volunteers to help in making up surgical dressings so that we may have a stock in hand to deal with any emergencies that may occur. Now, it was shown at Dover how vitally important it was to have such a stock of dressings. A large number of female volunteers responded to the call, but the total number of student volunteers was four! I hope "Student" himself was one of these four. Such a response, however, makes one feel that the desire of the average student to help in the Hospital's war effort is not sufficiently intense to persuade him to make some self-sacrifice. For the sake of our country, our love of freedom, our very lives, let us bestir ourselves *now* before it is too late—and "Go to it."

Yours, etc.,

P. M. F. BISHOP,

Guy's Hospital, S.E.1. *Deputy Superintendent.*

"Criticism"

SIR,—We have been encouraged by the letter of "Student" in the last number of the *Gazette*. It is true that there are a number of students who would like to have more particulars concerning their duties in Air Raids and on the treatment of wounded. There are, at the moment, a considerable number of people who are wondering whether their duty does not lie in joining one of the forces. If it is our duty to qualify, let us justify our existence by having a set of people who know their duty in an Air Raid and are willing to do it. With this aim in mind, may we make a few suggestions.

Firstly, it is evident that the majority of raids will occur during the evening or at night, when there will be relatively few people at the Hospital. Therefore, students should be divided up into groups which would be on duty at the Hospital in eight or twelve hour shifts. A rota would be arranged so that the same group would not always be on night duty. This would enable fresh teams to take over at regular intervals.

Secondly, the present lists of students are made up in such a way that people are placed in positions completely alien to their experience. Is it fair to the patient or the student to ask a man to give an anæsthetic when he has either never given one or has given dental gas and oxygen only? Or again, how can a dental student be expected to put up a Blood Transfusion in times of stress when he has never done intravenous work before? The reverse is also true. There are men in the Demolition Squads who have nearly qualified. We would suggest that duties should be arranged in conjunction with appointments, and that these duties should be added to the standing orders already in existence.

Each department should have its quota of senior men for the more skilled work. In addition there would be a number of junior men working in groups under their senior. These would be responsible for getting trays ready, moving beds and cleaning patients. There should be trained stretcher bearers who could be called upon as required. In addition there should be men whose sole job is to work lifts and keep passages clear.

Finally, may we suggest that the time has come for a certain amount of compulsion and to remove from the Hospital the "happy go lucky" attitude of so many people. Let us have distinct orders similar to those issued by Sir Cooper Perry during the last war.

Yours, etc.,

"TWO STUDENTS."

Guy's Hospital, S.E.1.

Resident Dental Officer

To the Editor of the GAZETTE

SIR,—I wrote to you about six weeks ago asking why we had no Resident Dental Officer here at Guy's. May I repeat this request in your columns?

Most of us, in our time here, have had to deal with bleeding tooth sockets following dental extractions, and we are certainly not qualified to do so. Within the last 24 hours I have seen a case which has prompted me to write this letter. A patient had had a dental extraction at Guy's in the morning; at 4 p.m. she arrived at the Front Surgery having lost a considerable amount of blood. After trying several first aid remedies for the arrest of dental hæmorrhage, a stitch was put in, but as this failed the patient was admitted five hours after her arrival in the Surgery.

What an advertisement for a hospital which boasts of having the best Dental School in the country!

Please give us a Resident Dental Officer soon.

Yours, etc.,

"EVEN MORE HARASSED O.P.O."

Guy's Cricket Club

To the Editor of the GAZETTE

SIR,—I should like to draw attention to the lack of support of Guy's Cricket Club. Before the war, the Cricket Secretaries managed to maintain two elevens each season; now, however, it would seem that the war-time secretary has considerably more difficulty in finding players for even one eleven.

Since it was decided to run the first eleven from Guy's, I feel that everyone ought to co-operate with the secretary and enable him to use the good players at the Base Hospitals.

It appears that this is frowned upon at Pembury because it means enlisting the services of players comprising the Pembury Eleven. Our Pembury brothers have arranged a rather good fixture list which, no doubt, gives them further cause for wishing to turn out a first-second eleven.

I suggest that all this inter-base competition should cease, or that Guy's cricket should come to an end so as not to further embarass the members of the first eleven working at Guy's.

Yours, etc.,

Guy's Hospital. S.E.1. S. A. COFFEY.

This Medicine

DR. FARRELL was typical of a not inconsiderable section of his profession. The day's work done, he sank into the nearest armchair and proceeded to envelop himself with a miniature smoke screen. And who could blame him? His pipe was to him the symbol of that calm with which the British Empire faces its difficulties, whereas, did he but know it, it bid fair to become the symbol of a mulish stolidity in a world of rapidly changing values and omens of the direst kind.

Books did not appeal to him; indeed the epithet "bookish" was certainly not for him. The study of Chaucer's Prologue at school, far from opening to him the floodgates of English poetry, had very effectively bolted and barred them. "An absolute sickener," he had called it, and he had, in a literary sense, never really quite recovered from that experience. For his professional reading, he usually culled the first twenty pages of the *B.M.J.* in the hope of finding some new medicament to pump under the skin of the next patient who might happen to suffer from whatever complaint it catered for. He also was not averse from a perusal of that little periodical called *Clinical Cliches*, produced by the enterprising firm of Messrs. Nuxcumgert Co. This was usually full of learned detail over which he skipped lightly, and was evidently written as a pot-boiler by some newly-fledged consultant.

As a doctor, however, he was a great success. The ready smile, the slick (if somewhat unscientific) explanation of those distressing symptoms marked him out as the man to consult when the need arose. "Just a little fat around the heart, Mrs. Adeps," he would say impressively, as he disengaged the ear-pieces of his stethoscope. Five shillings would then exchange hands, at which time Dr. Farrell sank back with an air of exhaustion into his chair, and a small sigh of contentment would escape from Mrs. Adeps at the thought that it was nothing worse than that little circumscribed fat around her heart.

His philosophy of life was simple and, briefly, consisted in thinking that everything happens for the best in the best of possible worlds, and that there was in the world a very great deal that had to be taken for granted. His philosophy, then, simply enunciated, made him deaf to wrongs and injustices which sting many people to a white heat of fury. It also absolved him from the necessity of probing too deeply into anything that required much thought. "What a multitude of facts there are in the study of medicine," he would say, "which one has to take for granted," and

then, recalling his study of physiology, he would rail vehemently at some of the experiments which he had been called upon to do then. Uppermost in his mind was an experiment called the " Genesis of Tetanus " upon the frog, " that *souffre douleur* of generations of medical students," as Oliver Wendell Holmes had called it. The slicing and slaughtering of that inoffensive little creature, to prove what had already been amply demonstrated myriads of times, struck him as being a mere piece of folly, a glaring instance, in fact, of the way in which medical education was still fettered by the manacles of tradition. His viewpoint, however, was strictly utilitarian and not sentimental.

As a student, any informal and academic discussion on some interesting point by his fellow-students would invariably produce the comment: " That's no good to you as a G.P.," and he would then bend over his " Aids " with a renewed intensity.

At the age of 55, Dr. Farrell began to realise that the foundations of his medical knowledge were not very secure. He had been very forcibly reminded of this when one of his assistants (from whom he had parted more in anger than in sorrow), bluntly told him, by way of a parting shot, that he was no doctor, but merely a " medicine man." He had felt inwardly that there was some justification for this remark, but a busy industrial practice, so he argued with himself, allowed nothing better than a trail of slipshod diagnoses covered over by bottles of medicine.

On this particular evening, he happened to pick up a paper on which the word " chemotherapy " caught his eye, followed closely by another mystic word, " para-amino-benzene-sulphonamide." " Gee ! sure, that's a mouthful," he said, mimicking an American friend. He read on. " This substance is converted in the stomach to sulphurilamide, and its effect is probably bacteriostatic." He was getting interested. This was medical science, not just " pain under the right ribs, give her a bottle of the stuff in the blue Winchester on the top shelf."

There was a knock at the door. The dim light in the hall revealed the pallid face of Mr. Thompson from No. 5, Gas Street. " It's me wife, doctor. She's had a pain in her back for about a week, and now she says her kidneys feel that cold and heavy she has taken oil of jupiter, without result." " Oil of jupiter, be damned," mumbled Farrell to himself. " She can't even spell the name of the muck." With that he sent *Clinical Cliches* hurtling into the wastepaper basket.

Muttering imprecations on Mrs. Thompson and all her kind, he thrust a box of brightly-coloured aspirins into his pocket, and made for the garage.

Hospital Information, etc.

Notice

SOCIETY OF APOTHECARIES OF LONDON

Dates of Examinations, August, 1940

Surgery. August 12, 14, 15.

Medicine & Forensic Medicine. August 19, 21, 22.

Midwifery. August 20, 21, 22, 23.

Pass List

UNIVERSITY OF CAMBRIDGE

FINAL M.B. EXAMINATION

Easter Term 1940

Part I.—*Surgery, Midwifery and Gynæcology*

G. E. H. Enderly — D. M. Jackson
P. Haden — M. C. Mundle

Part II.—*Principles and Practice of Physic, Pathology and Pharmacology*

P. Haden — G. T. G. Thomas

EXAMINATION IN PHARMACOLOGY

Easter Term 1940

I. L. McKelvie

Changes of Address

W. G. Gill, Surg.-Lt.-Comdr. R.N.V.R., H.M.H.S. " Vita," c/o G.P.O.

P. D. Kolesar, Lt. A.D. Corps, Aborfield, Berks.

J. A. Wakes Miller, M.B., B.S., 9, Woodland Avenue, Northampton.

H. McD. Parrott, M.B., B.S., Hightrees House, Nightingale Lane, S.W.12 (next door to old address).

A. Sandison, O.B.E., M.D., 62, Anchorsholme Lane, Cleveley, Lancs.

Marriages

BUCKNALL—MONCUR.—On June 1st, 1940, at Norwood, Christopher Bucknall, of 98, Beulah Hill, Norwood, to Constance Myra Moncur, of 60, Whitworth Road, Norwood.

DARKE—WILD.—On June 12th, 1940, at All Souls' Church, Langham Place, W.1, Christopher Sydney Darke, M.D., to Margaret A. E. Wild.

FAWCITT—LANG.—On January 30th, 1940, at Holy Trinity Church, Sliena, Malta, Ernest Fawcitt, Ph.C., to Lilian Lang (G.A.R.N.N.S.).

INGRAM—WOODHAMS.—On May 25th, 1940, at St. Mary's, Battle, Sussex, Frank Longden Ingram to Mary Woodhams.

EDS. { N.A.N. B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LIV — *13th July* 1940 — *Number* 1356

PASSIM

ON the surface, this last fortnight has been one of calm, a rather ominous calm before the storm, which we are assured is due to break. It has not been an idle time, and every available moment has been utilised in an attempt to render this island impregnable. Our Navy has proved its strength and its watchfulness once again, whilst the steady ceaseless toll taken by our Air Force on the enemy's armament centres, ports and lines of communication is having such an effect, both materially and morally, that it cannot be concealed, even in that land of secrets. In reply, the raids by enemy bombers, though frequent in certain areas, have been costly to him and poor in results.

It is not to be supposed that the enemy is in any way inactive. Although delayed a little perhaps by uneasiness about the Balkans, he is undoubtedly massing every resource he possesses ready for attack upon this island. There is little originality in the Totalitarian states and their methods of attack are rapidly becoming plain. It is said that Hitler boasts that he never sends his soldiers to fight unless he has already won the battle for them: the first rounds in our fight for existence are already being played. Firstly, it has been necessary for us to fire on and sink part of the fleet of our erstwhile ally. This was unavoidable for our own safety, but clever propagandists and a government controlled press will use the incident as a keystone in the framework of their attempt to alienate the French people from our cause. If they deem it desirable, the German controlled French government may well break with us entirely. Secondly, the Martinique sensation has been exposed as but part of a vast system of German propaganda directed solely at swaying a very fickle American public opinion against us once again. With three-quarters of the world's gold in their coffers and a Presidential election in view, there is still a danger that the Isolationists may be convinced that the struggle for Britain is but a petty European squabble. Thirdly, Ireland still maintains a benevolent neutrality, but has little defences, barring our fleet and air force. Finally, we must look to ourselves; we are fighting for freedom and for religion, but whatever our cause we can only succeed if we are a united people and Empire. It is a sad reflection that in this country, men should have been found who needed to be gaoled, not on account of open pacifism, as in the honest days of twenty-five years ago, but on account of fifth column activity. This last is a senseless phrase and must soon be abandoned for that of "treachery," which it seeks to elevate to the level of justifiable political activity. Some traitors, possibly, are still at large; many more, not so much wilful, as stupid by a process of wishful thinking, are still to be found who by laziness, apathy or rumour-spreading are doing nothing to help the country and not a little to aid the enemy. During the next six weeks every available ounce of man-power must be utilised to the full and organised with all efficiency to the one end. We possess now the advantage that this island forms a strong and compact unit and we still rule the seas, whereas the enemy must police a vast tract of country with an indefensible coastline. He, in his turn, can strike at us from many different angles, and can also menace our shipping lane, the Channel. Should invasion come, our soldiers have but one desire, and that is for a straight clean fight against the enemy, which has so far been denied them. It is the duty of our Government to-day, to do all in its power to reassure them that this battle will be won by arms and cannot be lost through treachery.

As regards our own part, our organisation has not as yet been tested by reality. The air raid

warning a fortnight ago gave useful practice in testing out our dispositions, and then became rather tedious. The less defined duties of the student have been given careful forethought and some revision. We hope that the letter we printed in the last issue, from the Deputy Superintendent, has been taken to heart, and his various notices carefully studied.

OFFERS for the reception of evacuee children have poured in from the Dominions and from the U.S.A. with very gratifying spontaneity. We publish a telegram in this issue from an old Guy's man offering to receive two children, and shall be glad to communicate to him any names that are forthcoming. We have nothing but praise for the scheme itself; how far it will be effective must depend upon the speed with which safe passages can be arranged. This must obviously be a very lengthy business to-day.

WE have been asked, at the request of Mrs. Lake (*nee* M. J. Roberts), to enquire concerning the whereabouts of her husband, Lieut. F. B. Lake. He was last heard of in Belgium, in charge of "A" Company, 4th Field Ambulance, and has been posted as "Missing." We should be very pleased to transmit to Mrs. Lake any information supplied to us which might be of value to her.

P. 192, second column of the last number of the *Gazette* should read :—

In this way, by additional expenditure on a flowmetre, oxygen supplies . . .

Inflammations of the Middle Ear Cleft

A Clinical Lecture delivered at Guy's Hospital on Monday, 6th May, 1940, by T. B. Layton, Esq., D.S.O., M.S.

GENTLEMEN, — Inflammation of the middle ear cleft is not a disease in itself, it is always a part of inflammation of the upper respiratory tract, and its symptoms and manifestations vary with the extent to which the upper respiratory tract is involved.

Before going on to a clinical description of the condition, I must first of all consider it from the anatomical point of view, from the bacteriological point of view, and from the point of view of morbid anatomy. Also, I want to carefully consider certain vague and indefinite terms in general pathology that we find ourselves constantly using.

Our subject furnishes a good example of the fact that in clinical medicine inductive and deductive reasoning often alternate. There are young doctors to-day, who imagine that there is no room in medicine for deductive reasoning, and that induction is the only thing that they have to consider. A hypothesis of what we may call "consecutive jumps" was held by all the leading otologists in the early twenties of this century. We have been working on it for forty years. It has saved lives, it has begun to save hearing, and it has had a long period of extreme usefulness. Then, in the late twenties, fresh evidence of a radiological nature made its appearance which indicated that the theory was not correct.

As a result, we had to think afresh and develop a new hypothesis concerning the spread of inflammation up the middle ear cleft. It was also necessary to reconsider the whole of the symptomatology, to have a new approach to the whole of the treatment, and particularly to reconsider the indications for operation both upon the drum-head and upon the mastoid.

I will now make a diagram of the middle ear cleft and explain to you what I have called the hypothesis of consecutive jumps. There is a blind alley known as the middle ear cleft, it has three parts with two narrowings. According to this hypothesis, inflammation travels up the Eustachian tube, it may or may not get stuck at the first narrowing. If it does, it is called a Eustachian inflammation (1). If it gets past that narrowing it gets into the middle ear, and it is then called an otitis media (2). It is then stopped at the second narrowing, but if it goes past that we have the condition which is called mastoiditis(3). The man who most clearly laid this down was Charles Heath, who described certain dams, which he called the Eustachian dam (A) and the mastoid dam (B). His hypothesis was that as the inflammation travelled up the middle ear cleft a swelling of the mucous membrane would occur ahead of it, forming a dam, thus conveniently stopping the spread of the inflammation. If, however, the inflammation got into the next part before the dam was formed, then it was that dam which prevented adequate drainage down the Eustachian tube. The Aditus forms the last line of defence and if this mastoid dam was fully formed before the otitis media was developed it stopped the spread into the mastoid region.

There is no doubt that the other otologists of

that day had exactly the same views, although they did not enunciate them so definitely as did Charles Heath. Heath did a great work for otology, because, as Mr. Mollison has always pointed out, he insisted that the inflammations of the middle ear clelt must be considered from a physiological point of view and not merely from the point of view of life and death. It is as much the business of the ear surgeon to save hearing in the many as it is to save lives in the few.

the mastoid." They urged early paracentesis in every single case of otitis media, assuming that it prevented the more serious condition of mastoiditis. This view could only have been held by men who believed that if they relieved the pressure they would save the inflammation from going round the bend. We have learned now that paracentesis never has saved a mastoid operation. That is one of the things I shall have to deal with if I am allowed to give more than one isolated lecture on this subject.

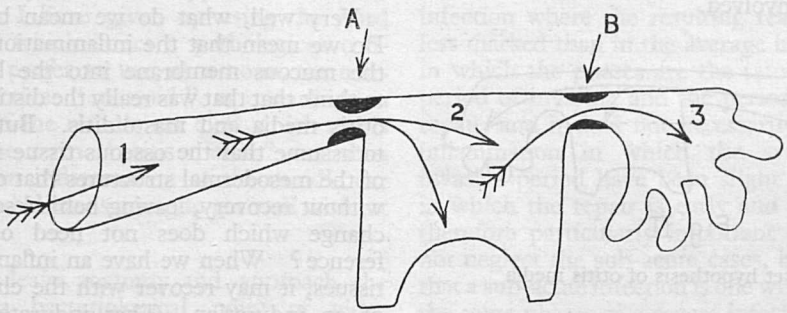

Fig I

The hypothesis of consecutive jumps.

One of my seniors to whom I owe much was the late Mr. James Atkinson. I know that he had that conception of otitis media. In discussing the symptoms of mastoiditis with him I remember the stress he laid on the fact that a large amount of discharge must indicate mastoiditis, because one could not imagine that the mucous membrane of so tiny a cavity as the middle ear could possibly produce so much discharge. Although I was twenty years his junior, I remember telling him that it was not his business to imagine, but it was our business to observe. One day I had at one of the scarlet fever hospitals a case in which there was doubt whether a mastoiditis was present or not. The patient had the most extraordinarily profuse discharge, so profuse that I had never previously known that so much discharge could come from the ear. If Mr. Atkinson's teaching had been right, this was undoubtedly a case of mastoiditis. Fortunately for the patient, however, he was so ill with scarlet fever that it was quite clear that no operation could be done at that time, and by the time he was in a fit state to be operated upon, the discharge had entirely ceased, his hearing had returned, and his drum-head was healed so that not even the scar of the perforation was visible.

When paracentesis became a vogue, the late Sir William Milligan and Mr. Herbert Tilley were its staunch disciples claiming that it "saved

There is again a group of people who refuse in any circumstances whatever to make the simple incision into a retro-aural swelling—an operation that is of the utmost value in a limited but definite number of cases, and which will result in complete recovery of the inflammation of the middle ear cleft. The argument against it is that in every one of these cases where they perform the mastoid operation they have found that the patient has had a mastoiditis. It is quite clear that they are still in the mental condition of those who believe that the mere presence of pus in that cavity means mastoiditis.

Well, gentlemen, the dams have had their day, and that hypothesis that inflammation spreads up the middle ear cleft, must absolutely be discounted. It was the late Mr. Arthur Cheatle who led the way to that change. He was the first of the leading otologists who urged that we must study mastoiditis by means of the X-rays. I will not say that I was the cause of the first X-ray apparatus being put into the fever hospitals, but I think I may claim that I was the match that lit the fire already laid. We then had a series of very able medical officers who themselves were in charge of patients and who examined their ears, taking X-ray pictures, developing the plates, and continuing their study on the patients. The first was Miss Elsie Mann, now an assistant medical officer of health at Acton.

The second was Dr. Maurice Mitman, now the medical superintendent of Joyce Green Hospital. The third was Dr. N. D. Begg, now of the Eastern Hospital. It was clear from their radiography that in every case in which there was a full development of the otitis media there was an involvement of the mastoid region demonstrable by X-rays; it is upon this basis that the rocket hypothesis is founded (Fig. 2). According to this theory whenever the middle ear cleft is inflamed, all three of its component parts are simultaneously involved.

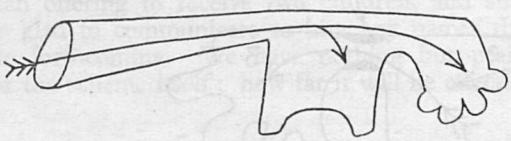

Fig II

The rocket hypothesis of otitis media

I want now to make some comments upon that radiographic work that was done in the Fever Service. It exemplifies two things. The first is that it is the clinician alone who can correctly interpret X-rays. The radiologist can only do so when he has been a clinician himself or has had the guidance of a clinician to advise him on his original reports. Therefore I do not merely advise you, I urge you always to go and look at the X-ray plates yourselves. Radiography is merely one piece of evidence in a chain of many pieces of evidence. It does not show any evidence whatever of an acute osteitis of the mastoid bone. What it shows is a swelling of the soft tissues in those parts, which are the mucous membrane of the mastoid antrum and its associated cells, and perhaps also of the soft part of the osseous tissue. It does not show rarefying osteitis in any stage that is likely to be of use to the otologist.

It will be seen from what I have said that our conception of ear disease has totally and entirely changed during the last fifteen years. What then is the difference between an otitis media and a mastoiditis? I do not know. Our hypothesis has not got as far as that. I ask you, however, to consider various points.

In the first place, does mere involvement of the mucous membrane of the mastoid antrum mean mastoiditis? No, it does not. A large number of patients recover entirely from that condition. Does mere pus in the cavity mean that mastoiditis is present? No, it does not. I have no doubt that Mr. James Atkinson was right when he said you cannot imagine that so much pus could possibly come from so small an area of mucous membrane. Where he was wrong was in assuming that if it came round the corner the case was irrecoverable without operation. There are still surgeons to-day who think that they are justified in operating upon the case every time they find a little pus in the mastoid antrum. They may be appropriately described as being still in the " little Jack Horner " stage in the development of otology.

Very well, what do we mean by mastoiditis? Do we mean that the inflammation has got from the mucous membrane into the bone? I used to think that that was really the distinction between otitis media and mastoiditis. But are we going to assume that the osseous tissue is the only one of the mesodermal structures that can be inflamed without recovery, leaving behind some permanent change which does not need operative interference? When we have an inflammation of soft tissues, it may recover with the clinical symptom of an induration. That induration means that there has been an increase of fibrous tissue laid down in the connective tissue, and a considerable amount of that fibrous tissue can become re-absorbed and the induration disappears. Alternatively, there may be some of it which is never re-absorbed, and the induration remains permanently throughout life. In the pathology of osseous tissue, sclerosis is to bone what induration is to soft tissue.

When I was teaching anatomy I used to describe the mastoid bones as being either cancellous or sclerotic, and I used to point out how the sclerotic ones might possess one or two sides. The question is whether all these sclerotic bones are not really pathological as the result of a series of inflammations that have gone up the middle ear cleft, giving rise to some inflammation of the surrounding bone which has resulted in a lasting sclerosis. There is a very fine collection of mastoid bones at the Royal College of Surgeons, collected and described by the late Mr. Arthur Cheatle. They may afford to one of you or to some other young otologist a ground on which to start the subject and this may lead to the discovery as to what is the function of the mastoid antrum and its cells, and what relationship they have to hearing. You will notice to what an extent deductive reasoning concerning a new hypothesis leads one on to numerous fresh lines of thought which necessitate more inductive observation before one can go very much further.

Lastly, there may occur in this osseous tissue a rarefying osteitis or caries. My own belief is

that when we talk about mastoiditis it is the caries of the bone to which we refer, and this is the irrecoverable condition for which operative interference is necessary.

But I am bound to admit that this is hardly even a hypothesis. There may be a caries from which recovery is possible, and there may be a caries from which recovery is not possible. There may be an ulceration of the mucous membrane covering the cells which is the determining factor between the two types of caries, and for this reason I have given up using the word "mastoiditis," which infers a pathological conception, and I prefer to use, as a noun, the non-commital adjective "mastoid" as meaning an inflammation of the middle ear cleft which needs operation. The term "otitis media" can thus be limited to an inflammation of the middle ear cleft which you believe is going to get well without operation.

Let us now leave anatomy and approach the matter from a bacteriological point of view. There are two separate groups of organisms in close relationship to the middle ear cleft. In the naso-pharynx there are a number of organisms that can pass up the middle ear cleft and cause an inflammation, in the course of which a perforation of the drum-head may occur. There is another group of organisms in the skin of the outer ear that cannot gain access to the middle ear cleft until the drum-head is ruptured. After the cutaneous organisms have got in through that perforation the disease can be labelled chronic. Until that has happened it is still an acute disease, even though the patient is quite well except for the ear discharge.

This is one of the few parts of the body where the pathology can be correlated with the clinical terms: acute and chronic disease. There are, however, certain misconceptions with regard to these terms which I would like to deal with for a few moments. I show diagrammatically on the board what I call the line of health; I represent it as a wavy line, because health is not absolute, and I represent in a sharp ascending curve the symptoms of an acute infection. That acute infection has two phases. The first is the period of invasion, the second is the period of reaction and repair which goes on until the descending curve rejoins the line of health. I find a great mistake is made because many people will call the period of reaction and repair chronic disease. The clinical term "chronic disease" should be limited to conditions where there has been some essential pathological change, which means that either there will be a permanent damage to the body or that there is a temporary one, the recovery from which is far more difficult and protracted than the recovery from an acute disease. This means that the period of reaction and repair is the important period therapeutically, and therefore surgically, in the treatment of all inflammations.

The other misconception, that I find so common, is the habit of calling this period of reaction and repair a subacute inflammation. In clinical medicine the word "sub-acute" should mean an infection where the resulting reactions are much less marked than in the average inflammation, but in which the phases are the same. There is the period of invasion and the period of reaction and repair, and it does not necessarily follow that the inflammation in which the symptoms of the invasive period have been slight will be the case in which the repair is early and complete. It is therefore particularly important that you should not neglect the sub-acute cases, but bear in mind that a sub-acute infection is one which goes through the same phases as a severe infection—a period of invasion and a period of repair—and the term should not be used for the period of repair of a severe inflammation.

I come now to the bacteriology of the middle ear cleft. There are two organisms which are commonly found. One is the hæmolytic streptococcus, the other is the pneumococcus, or perhaps I ought to say that one is *a* streptococcus and the other is *a* pneumococcus. For many years I have taught that the hæmolytic streptococcus is the cause of the vast majority of all inflammations of the middle ear cleft. I believe that is true, but I may be wrong because I have omitted in my investigations to make a comparison. In other words, I have cultivated every single case since January 1st, 1929, in which I have had occasion to operate on the mastoid bone for mastoiditis, and the hæmolytic streptococcus has been present in overwhelming numbers. In a small number of cases one has found a pneumococcus, and once or twice I have had a Friedlaender's bacillus and a vibrio septique. But I have omitted to cultivate with any regularity discharges from the middle ear. The reason why I did not set out on that was because I felt that I was not going to get a pure culture from the middle ear cleft, and that I was liable to get associated with it the skin organisms. That is quite true, but if in these cultivations you separate off the organisms that you know to be nasopharyngeal from those that you know to be cutaneous, a different bacteriology might have been found. One who has done this consistently is Dr. R. E. Smith, the medical officer

of Rugby School, and he looks upon the pneumococcus as the common organism in inflammations of the middle ear cleft just as I look upon the streptococcus. However, it is possible that in the population that I am dealing with, there is a much higher incidence of the hæmolytic streptococcus than that which he is associated. But it may be, on the other hand, that the hæmolytic streptococcus is the organism that commonly causes so severe an illness that we otologists operate on it, whereas the pneumococcus is the commonest organism in the less severe inflammations of the middle ear cleft that we call otitis media. This is a matter that needs further investigation.

I want you to understand clearly that knowledge of that nature can only be obtained from constant cultivation of every case. As I say, I have cultivated all my mastoids since 1929, and whatever the primary invasion of the upper respiratory tract, the hæmolytic streptococcus has been present in overwhelming numbers. It does not matter whether the primary disease is a disease caused by the hæmolytic streptococcus, such as scarlet fever, or whether it is in the nature of a virus, as in measles or influenza, or whether it is a totally different organism, such as that found in diphtheria. In all of them the hæmolytic streptococcus is found in the mastoid. I once operated on an acute mastoid in typhoid, and the organism was a hæmolytic streptococcus. Mr. Mollison tells me that he has opened a mastoid in a patient suffering from a staphylococcal septicæmia, and again the hæmolytic streptococcus was the organism in the mastoid.

I have now to draw your attention to the fact that I have no statistics on this matter whatsoever. There are people who think that no observations should ever be mentioned, let alone published, unless they are proved by statistics. When you have been cultivating every one of your mastoids for a period of eleven years, it does not matter whether your figure is 70, 80, 90 or 95 per cent. —but you are able to say with all certainty that the hæmolytic streptococcus is overwhelmingly present in comparison with all the other organisms put together. In those cases where the hæmolytic streptococcus has been found there has been every degree of illness, from that of the child who has had no more evidence of otitis media than the fact of a discharge discovered on his pillow on a certain morning, to the patient in whom the organism has threatened life by invasion of other structures, combined with a septicæmia and distal streptococcal lesions. Bacteriologically they are all *a* hæmolytic streptococcus or *the* hæmolytic streptococcus.

I want, therefore, to give a word of warning to those who talk of the type of cases characteristic of the streptococcus mucosus. They have got no right to talk about any type of case characteristic of an organism if they only cultivate their mastoids when they suspect that that organism is present. I have seen with the hæmolytic streptococcus cases of every variety of mastoiditis. If these surgeons have over a period of years cultivated all their mastoids and are able to get a clear-cut picture of one particular type different from those I have seen, then I am prepared to admit a particular type of mastoiditis due to one particular organism. If we are to apply science to surgery, consistent investigation of the organism is needed to correlate the bacteriology with types of disease. Spasmodic investigations are useless for this purpose.

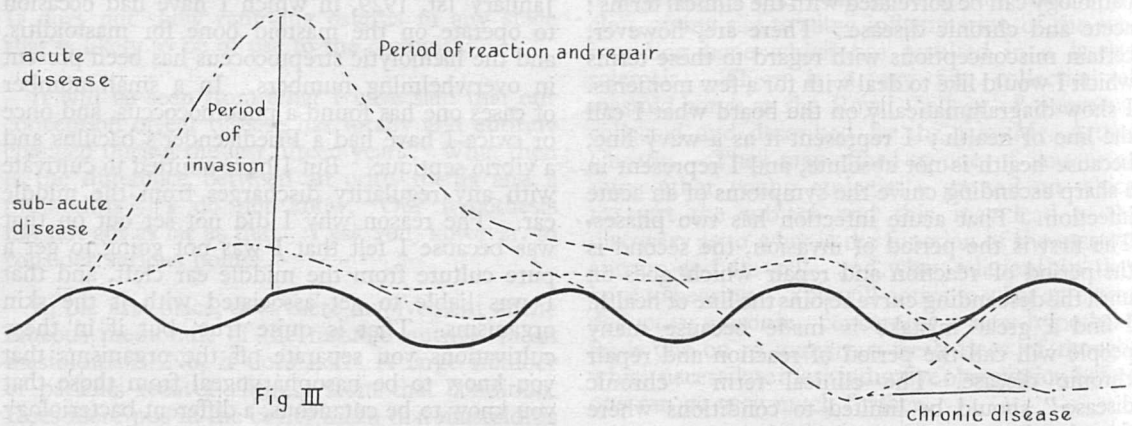

Fig III

The lines of Health and Inflammations

"America Revisited"

By W. H. Ogilvie, Esq., M.Ch.

Saturday, October 8th

I left Quebec at 6 p.m., and, changing trains at Montreal, got to Toronto just before 8.0. I was met at the station by Harris, and taken to his house for wash and breakfast, a family affair (three boys) preceded by grace. Then to the Toronto General, where I met the great Gallie once more. The sacro-iliac fusion I saw him do last year is now O.K., and back at work.

He discussed treatment of ununited fractures of the neck of the femur. He puts in a Smith-Peterson nail, and then a second guide pin above or below it according to where it is lying in the neck. Over the guide pin he slips a drill about a ½ inch in diameter and drills a hole into the head; into the hole he hammers a graft, usually cut from iliac crest. The pin and drill together look as if they take up the whole diameter of the neck, but the case he showed, ununited for 18 months, which had been done nine weeks previously, had clearly united by bone, and was allowed up for the first time, and was doing well. This morning he employed the same idea, for the first time, to fuse a hip which had not arthrodesed after a standard operation. He drove a long pin through the neck and head into the ilium, and then a drill and graft down it.

Harris had a case of carcinoma of the pelvic colon, without much obstruction. Previously he had brought the cæcum to the surface but not opened it—apparently a popular dodge here. He resected the growth, the distal section being about 2 inches from the pelvic floor, and did end to end union without clamps. Jones (of Cleveland) preparation—Mag. Sulph. daily and non-residue diet: the colon certainly appeared empty—there was no apparent soiling. He made a short cut in the anti-mesenteric border of the distal end, to bring it to the same diameter as the proximal. After a neat junction, he went on to extra-peritonealise the site of suture, a device he apparently learned from Abel. He said that any infection would then be outside the peritoneal cavity, and felt the plan had once at any rate saved a life. On the pelvic floor the job would be easy; here he had to mobilise the peritoneum of the left iliac fossa on the one side, and the mesentery of the ileum on the other, but with these flaps he buried the junction neatly. I criticised the extent of the planes that were opened and asked if he considered an extra-peritoneal cellulitis less dangerous than a drained peritonitis. The event suggested the reverse for the man had a gross infection of his abdominal wall next day, but improved after further drainage. In this abdomen there was a further tumour, a nasty-looking lump the size of a grape fruit, growing from the lower ileum at its anti-mesenteric border. It might have been an unusual metastasis; but two things—that the lumen of the gut was not reduced, and that it had a leash of very large veins going to it—suggested that it was an embryonic remnant of long standing. Harris removed it locally, and the pathologist reported it, on frozen section, to be a leio-myoma.

In the afternoon Harris took me to a football match, Canadian Rugby, between the Argonauts and the Tigers. The game has a much closer resemblance to American football than to Rugby, but some difference in the rules makes it a much more open game. There was plenty of running, passing and kicking. Nevertheless I still prefer Rugby Union, and find the armour and frequent "huddles" irritating.

This evening Harris had a dinner party, with Gallie, Boyd, Best, Wookey, Graham and Mackenzie. I had met all last year except Boyd, the pathologist, who had just come to them from Winnipeg. The talk, as everywhere, has been around the crisis—a desire to know what we in England think of the settlement. I was very moved to find the intense love for England among this crowd, and their unquestioning assumption that they and their sons would be over at the first hint of trouble. Graham was saying how poignant had been the last week-end at their place at Muskoka, every beautiful scene bringing the thought that it might be the last time he and his son would see it.

Monday was "Thanksgiving Day"—a public holiday to commemorate the first harvest of the Pilgrim Fathers, but held on a different day from the American thanksgiving of identical origin, which comes at the end of November. Mr. and Mrs. Graham took the Harrises and myself in his new Cadillac up to Minett on lake Rosseau. We spent Sunday getting there, taking a wide detour round some of the most beautiful lakeland scenery to get a look at the autumn colours. Graham was stopping all the time to get colour films shots of the maple woods and the harvest of green apples and pumpkins. We arrived at Minett's hotel just after dark, and got delightful rooms and a fine supper. This is a holiday hotel, built of wood, but each room has its bathroom, and the finest

view possible. Bill, the settler who looks after the Graham's house and boats, was there to meet us with his brother. Graham had operated on the brother's wife a fortnight before, and told him that she was doing fine and would soon be leaving hospital. On Sunday Bill brought Graham's motor boat, a fast 22 footer, across to the hotel, and we spent the day threading our way round islands and from lake to lake. We had a picnic in the sun on the rocks outside the Graham's house, and finished up at the hotel as dusk came. There was a message for him to say that the patient had suddenly died from pulmonary embolism, and he had to go round with Bill to break it to the brother. The drive back in the dark was long, and, for the last half, along roads crowded with returning holiday traffic.

Sector News

Guy's Letter

APART from the excitement of a night air raid alarm, Guy's is carrying on with its normal routine activity. Now that the wards and out-patients are well organised on a war basis, it only remains for us to prepare for the adequate handling and treatment of casualties. With the help of the local A.R.P., casualties were prepared which to the unpractised eye appeared only too realistic. Right from their admission to the reception room, to their preoperative preparation and treatment in the various wards, the whole performance was carried out with a smoothness that does credit to Guy's staff and students. Indeed, one zealous student set up a complete intravenous drip and it was something of a relief to discover that rubber tubing had been substituted for a vein under the bandage.

Once again the examination atmosphere has crept into our midst and the old examiner's scythe is hard at work. Whatever may be the reason, one cannot help but feel impressed by the good results that the majority of our candidates are achieving. Guy's, at the present time, is a combination of voluntary hospital, casualty clearing station and teaching institution, and that she can satisfactorily carry out all these tasks together should give us complete confidence in those who will lead us in the days of stress that are sure to follow.

B. L.

Pembury Letter

IF variety is the spice of life, the past nine months have turned Pembury into a cruet. We have had our periods of activity and lethargy with the civilian sick, then the casualties from Dunkirk, followed by an almost complete evacuation of all cases. Finally, we have been the recipients of over six hundred " Seniles " evacuated from other areas. These latter are, of course, a section of the population calculated to keep nurses, bedpans, catheters, " Flit " sprays and Pathologists busy; but, from the clinical aspect, we have had an opportunity of seeing and teaching on a selection of degenerative diseases seldom found in a Voluntary Hospital. We believe that when Pharaoh hardened his heart, it was an amateur performance compared with some of the cardio-vascular systems we have seen recently.

When the enemy's aerial offensive first started, the wail of the siren was ubiquitous in south-east England. The new system of air raid warnings is certainly preferable, even if the risk is somewhat increased. We recognise full well that what is to come will be far more severe than anything we have as yet experienced. On the other hand, sleep has its virtues even in the most extenuating circumstances.

Dr. Waterfield has done some excellent work organising mobile transfusion units in the sector. One of these is in embryo form at Pembury, and its period of gestation may terminate at any moment. Should circumstances so happen that instead of passing into labour, it should become a lithopœdian, neither money nor energy will have been wasted.

N. M. J.

Orpington Letter

THE chief topic of conversation in the past fortnight has been the future of the Frenchmen in our wards. Many of them are now fit again and nearly all are well enough to be moved, but, in spite of many rumours and the preparation of many nominal rolls, they are still with us. We shall be sorry to lose them when they do go, for they have been fine patients and, with the aid of numerous small red dictionaries which have appeared in the wards, we have lost much of our initial nervousness in attempting conversation with them.

During the present period of waiting, the number of Service men admitted has been almost negligible and we are very glad that Guy's have started to send us convoys again.

In our last letter we mentioned that one of our Moroccans was to be seen dragging a wooden Dismal Desmond behind him. A pall of gloom descended on the Hospital last week when it was discovered that the said animal had been lost. However, owing to the generosity of the military authorities here, a new specimen has been provided which emits a most realistic bark when suitably stimulated.

During the past week Mr. Bromley and Mr. Brock have been down here to see cases. We were very pleased to see them, and are very grateful for their help and advice.

A. T. M. R.

This Medicine

THIS MEDICINE

Test Paper as Answered by R.A.M.C. Recruit, after Two Months' Training

1. *Question :* " What do you mean by a Pressure Point ? Give a list of as many as you can."
   Answer : " Presher Pints."
2. *Question :* " Describe briefly the various types of fracture."
   Answer : " Greenstik, Oblique, Transverse, Comminuted.
3. *Question :* " Say what you know of the Circulatory System."
   Answer : " The art akts a pump which serklats the Bluoid round the Body, feds Vains and Bluoid Vesels and Copileris."
4. *Question :* " What is the Normal Temperature, Respiration Rate and Pulse Rate ? "
   Answer : " The tempricker — 92 to 102. Puls — 68 to 76. Resperackton 13 to 15 a minit."
5. *Question :* " Say what you know of the Digestive System."
   Answer : " Mouth throuit larg intestine and smal intestine."
6. *Question :* " Say what you know of the Respiratory System."
   Answer : ——
7. *Question :* " Say what you know of the Nervous System."
   Answer : ——
9. *Question :* " What are the bones of the lower leg ? "
   Answer : " Theurar antibea phlanies."
10. *Question :* " What are the bones of the upper limb ? "
    Answer : ——
11. *Question :* " What different types of Joints are there ? Give examples of each."
    Answer : " The hinge gionts at elbo. Ball giont sock.

It will be seen that Questions 6, 7, 10 were apparently not even noticed by the candidate.

The prize for this week is awarded to M. A. Imray, Lieut. R.A.M.C.

" Love "

By Modfrey Lynne

(Lover Extra-ordinary to Guy's Hospital)

PERHAPS one of the oldest diseases in the world, Love has never appeared in a text-book of medicine as a clinical entity. During my many years of experience in this branch of science, I have felt that such an article as this would be of great help for those about to sit for their final examinations and also to the newly qualified Houseman. I feel that even Registrars might obtain some help from my brief notes.

ÆTIOLOGY

The condition seems to occur equally in the two sexes, and is most common between the ages of 14 and 40. Other clinicians have recorded cases outside these limits, but I think that these are probably pathological types of the same condition. The more acute type occurs most frequently in males, and although the attacks are shorter, they are more intense, and cause far more constitutional symptoms. The more chronic type occurs in females, especially between the ages of 18 and 22, and although all the symptoms are present, they are not so easy to elicit, as the patient covers them with a veneer of casualness.

Infants are immune from the disease, but this does not seem to be due to any anti-body derived from the mother, but rather to a lack of some of the essential hormones.

The condition was first described by Dr. Adam centuries ago.

PATHOLOGY

Unfortunately, very few cases of Love come to the post-mortem table, and those that do are usually found to be suffering from cut throat, immersion or other medico-legal conditions. Some pathologists have said that in this condition patients may die of a broken heart; I have seen one case of a ruptured myocardium due to a coronary infarct due to arterio-sclerosis, which was in its turn due to an increasing overdose of some alcoholic extract which the patient was taking to cure himself of his disease. For this reason, it is not uncommon to find fatty degeneration in the heart and liver, and also a cirrhosis of the latter organ, but these changes are usually found in males. The female changes are often found to be an increase in size of the uterus, and changes associated with it, but here again the findings are usually complicated by medico-legal factors.

Generally the post-mortem findings are negative, although one of my colleagues has said that there is universally a softening of the cerebral cortex. I do not agree.

SYMPTOMS

These may be divided into two types, physical and mental.

(A) *Physical*

The most constant physical symptoms are gastro-intestinal. Pyloro-spasm is extremely common and seems to come on immediately any food is placed before the patient. This is made worse if the object of the patient's desire is present. Test meals done here at Guy's on fifty normal students were rather disappointing, as forty-eight showed some degree of pyloro-spasm; of the two students who had no delay in emptying, one was married and the other was clinically not truly of the male sex. However, from this investigation it was concluded that a high proportion of medical students suffer from Love. This was put down to the environment in which they worked, and to the high proportion of carriers that appeared to be present among the females with whom they worked.

Other gastro-intestinal symptoms are nausea, vomiting and abdominal pain which is usually generalised. No doubt many appendices have been removed in error when all the time the patient was suffering from Love. Love is a pure disease, if not complicated by any malignant change, and thus the term "lily white appendix" arose.

Frequency is another common symptom, especially when the objective is due to arrive and is late, and palpitations and hot flushes are usually complained of. Sweats are common, and oddly enough these are usually associated with a dry mouth and tongue. Dysphonia, especially when the patient is alone with his objective, is common.

Loss of appetite and a resulting loss of weight are always found, though the loss of weight never predisposes to intercurrent infection.

(B) *Mental*

The mentality of the patient changes considerably, and the change is usually of the manic-depressive variety. He will be wildly elated over small things that the objective has said, and some chance remark may plunge him into the depths of despair. He is often suicidal and homicidal at these times. Some degree of persecutory delusions are always present; he feels that the world is too hard for him, and that persons known or unknown are trying to steal his objective from him. Of course, he is usually wrong, and this is obvious even to the untrained observer.

There is always some degree of alcoholism present. When the patient is elated in the manic stage he usually prefers light wines, especially champagne, but when he is depressed he always drinks beer or spirits, and quite often becomes unconscious on account of this. His explanation for this is that it helps him to forget.

SIGNS

The patient looks ill. There is a persistent tachycardia, and the systolic blood pressure is usually high. There are signs of loss of weight.

The cardio-vascular system is normal, but auscultation of the chest in a classic case may often reveal the presence of occasional deep sighs, best heard over the large bronchi.

The abdomen is found to be normal in males, although a large tumour arising from the pelvis may often be found in females.

The central nervous symptom findings are inconsistent, increased jerks are usually found, but the plantar response is always flexor. One case I recently saw had extensor plantar responses, but he was found to be a late case of G.P.I., which is one of the complications of Love. The discs are normal, but although the pupils react to light and accommodation, they are often dilated and have a look in them which renders them "glassy-eyed." The forehead is often wrinkled, giving the patient a very worried expression, but I have never found any seventh nerve damage which could account for this.

Laboratory findings are unusually interesting. An electro-cardiogram shows extra systoles, and some degree of cardiac flutter, though this latter is only present when the objective is near. No

organism has ever been cultured from the blood or cerebro-spinal fluid, though some observers believe an amœbic form of infection may be responsible, and even went so far as to write a paper on this subject under the title of "The Love Bug Will Bite You."

X-ray of the chest and abdomen are normal. The test meal shows a considerable delay in emptying time, and a low free acid curve. This latter is no doubt due to the high amount of alcoholic extracts consumed as a therapeutic measure during the course of the disease.

DIAGNOSIS

This is usually easy, because no other disease has so many consistent signs—gastro-intestinal upsets, palpitations, alcoholism, manic-depressive manifestations, and loss of weight.

Useful aids to confirm the diagnosis are :—

1. Ask the patient a few simple questions, *i.e.*, "Do you know Miss X?" If he denies this hotly then the condition is almost certainly one of Love.

2. When he is very depressed say, "I saw Miss X just now," and if he has an epileptiform convulsion or becomes wildly excited with dilated pupils, then again he is suffering from Love.

Conditions which simulate Love are acute appendicitis, carcinoma of the stomach, auricular flutter, and lastly, to be always excluded, clinical insanity; this latter is often very difficult to do.

TREATMENT

The treatment is difficult and unsatisfactory. The first step is to find out who the objective is. I have found that the pulse of the patient should be taken, and then a series of names should be read out. A sudden increase in rate usually gives the clinician a clue to the identity of the objective.

The next step is to ensure that the patient and the objective are brought together a great deal, and by this means he will either begin to show signs of a cure, or he will wish to marry his objective; this, however, is a complication of Love and will be dealt with later.

An outdoor life and plenty of exercise is useful, and a plain light diet is essential. My late house-lover suggested that an atropine mixture is useful for the troublesome pyloro-spasm. He had suffered from the disease himself, and found this of great help.

Nothing specific can be done for the extra-systoles, and for the manic-depressive disturbances. No amount of explanation is of any use, as the patient is usually stubborn and stupid as far as his condition is concerned.

PROGNOSIS

This is usually bad, for although the patient is often quite easily cured, there seems to be no immunity. He quite easily catches the disease again, and goes on getting repeated attacks until the late complications arise.

COMPLICATIONS

1. He may marry his objective. In the acute stage he always wishes to do so, though this may often be a pseudo-marriage. Often after a year or so he is self-cured, and then realises his mistake too late.

2. An idiopathic abdominal tumour may appear in the abdomen of the objective. I say idiopathic because neither the patient nor the objective have usually any idea how it arose.

3. Very late and serious complications are tabes dorsalis, cirrhosis of the liver, depression due to unrequited love, and such medico-legal problem as suicide, etc.

I hope this article may be of some use to those who have suffered from Love, and to those who may be interested in it from a purely clinical point of view.

I am grateful to my wife for correcting the proofs of this article.

J. G.

Correspondence

Air-Raid Duties

To the Editor of the GAZETTE

SIR,—"Two Students" have criticised the methods of selection of the teams for air raid duties on three specific counts :—

1. That students have been allocated to anæsthetic teams, never having given an anæsthetic.

2. That dental students are expected to give transfusions.

3. That senior students are included in the demolition squad.

The facts are :—

1. All students in the anæsthetic team asked to be put there. They have all done the anæsthetic appointment except one, who is a qualified dentist.

2. Dental students are not expected to give transfusions. They are attached to resuscitation teams, which also contain a number of senior students, some of whom are being specially trained for intravenous work.

3. Senior students are in the demolition squad, but this squad does not come into being until

there is something to demolish and each of its members is attached to another team as well, in which he will function primarily. The demolition squad was chosen for its physique and not for the seniority of its members.

I am sorry that absence of compulsion should have been taken as a sign of "happy go lucky" organisation. It is with the greatest reluctance that people in this country resort to compulsion. Freedom is, in fact, one of the principles for which we are fighting. Unfortunately, however, freedom often leads to apathy. I am afraid there has been evidence of apathy in the lack of enthusiasm for voluntary attendance at air raid practices, etc., but now that a rota of duty has been established and the students have been given more specific responsibilities and times of attendance, this apathy is evaporating. It would seem that a system of voluntary compulsion is ideal in a community such as ours, and the student works best when he is allowed to volunteer to place himself unreservedly at the service of the organising authority, who may then virtually compel him to do his bidding. Neither I nor anyone else has ever doubted the goodwill of the student nor his desire to do his bit. Waiting and preparing and rehearsing for what he will be called upon to do in what is likely to be the greatest crisis of all our lives is not only tedious but unnerving. If the organisation is found wanting, the authorities will be to blame, but I am quite certain that when the time comes individual initiative will not be lacking and will go far towards solving the unforeseen problems which we shall encounter. This is not said in any spirit of complacency, but because I am satisfied that at last the spirit of action is beginning to be demonstrated by the students in a practical manner.

Yours, etc.,
P. M. F. BISHOP,
Deputy Superintendent.

Superintendent's Office,
Guy's Hospital, S.E.1.

Guillotine Amputations

To the Editor of the GAZETTE

SIR,—Mr. Atkins' interesting and instructive account of his experiences at Dover is one of the best things that have appeared in your pages. His observations on "abdominal concussion," on severe untreated burns, and on gas infections already countered by chemotherapy, deal with aspects of military surgery for which the last war offers no precedent, and are thereby particularly helpful. In thanking him for these, I must also deprecate the reference, probably unintentional, to guillotine amputations. It is clear from the context that he means no more than amputations rapidly executed and left widely open, but unfortunately the word recalls, and might be taken to condone, the worst surgical atrocity of the last war, a rapid removal of the limb by division of all the tissues in one plane.

The operation was introduced at a C.C.S. by a man who afterwards tried to live it down. Guillotine stumps were already retracted on arrival at the base and became more and more conical, providing the distressing problems of painful dressings, steady loss of fluid from the exposed tissues, and bone bare and necrosed for one or two inches. In England they were the despair of reconstruction hospitals. Traction on the skin edges was usually powerless to do any good; at best it brought them near to their original position, but never allowed them to cover the end or to heal. Re-amputation, often repeated because of the sepsis, was always necessary, and the final stump was very much higher than could ever have been imagined by the original operator, and too high for a functional prothesis. The matter was taken up by the consultants of both armies, and the operation was dropped so decisively that for the last eighteen months of the war any surgeon found guilty of performing it would have been transferred to a job where he could do less harm.

In dealing with war amputations speed and drainage are important, but so is sense. The time taken in turning back a skin cuff or flaps is negligible compared to that devoted to hæmostasis, while a guillotine amputation is no more drained than a good one with the flaps left open. Now that many with no previous war experience may be called upon to do amputations it would be lamentable if they should have to learn at the expense of our wounded this lesson of the last war—that guillotine amputation is a crime which no conceivable surgical or military circumstance can justify.

Yours, etc.,
W. H. OGILVIE.

105, Harley Street, W.1.

Evacuees

To the Editor of the GAZETTE

SIR,—Anxious take two children for duration. Sons or daughters of my contemporaries if possible.

W. MARK BROWN.

St. Albans,
N.Z.

The above is a reproduction of a telegram received here, and any replies should be sent to the Editor.

Review

Clinical Practice in Infectious Diseases. By E. H. R. HARRIES, M.D.Lond., M.R.C.P., D.P.H., and M. MITMAN, M.D.Lond., M.R.C.P., D.P.H., D.M.R.E. Published by Messrs. E. & S. Livingstone. *Price* 17*s.* 6*d.*

A NEW text-book of infectious diseases has entered the arena of medicine. Its two authors are active teachers of the subject they are writing about; in addition they have kept up to date with the literature and above all each has made solid contributions to their speciality. Realising the large gaps that frequently exist in a student's knowledge the book quite wisely starts off by teaching first principles. Once these preliminary chapters are mastered, the reader is well equipped to cope with the succeeding sections on individual diseases, which, while very detailed and specialised, are exceedingly practical.

As medical knowledge increases, so its various branches tend to become more closely correlated. Thus it is often necessary when writing on one subject to discuss features of an altogether different aspect of medicine. It is inspiring to watch these two authors accomplish this difficult task with the same ease and ability that they display in their own field of infectious diseases.

No amount of " armchair " teaching or reading can ever replace personal bedside observation; accordingly the numerous illustrations and diagrams throughout the book are designed to concentrate the clinician's attentions on essential details when confronted with cases of infectious diseases.

This text-book is well written and edited, and one can safely prophesy for it a long career of definite appeal and popularity among all ranks of the medical profession.

B. L.

Sport

Hospital Blues

THE following have been awarded Blues or Half Blues, subject to confirmation by the Clubs Union Council :—

Rugger Club.—Full Blues : J. R. D. Williams, M. R. Mullins, A. G. Albers, T. Renton.

Soccer Club.—Full Blues : J. Elder, A. V. Hurst, D. A. T. Payne. Half Blues : A. G. Finney, C. S. Mathews.

Boxing Club.—Full Blue : A. S. Halamandres.

Cricket Club.—Half Blue : D. N. Fuller.

R. N. F. KYNASTON,
Hon. Sec., Blues Committee.

Athletics

A SPORTS meeting of the Athletic Section of the Clubs Union was held at the Nevill Cricket Club ground at Tunbridge Wells on Wednesday, June 26th.

The meeting was well supported, there being approximately fifty entrants for the various events from among the students resident in the Tunbridge Wells and Pembury districts. There were also many spectators.

Members of the staff acted as judges and time-keepers. Mr. Wilkie, scorning the use of the megaphone, used his stentorian voice to good advantage in his role as announcer. Mrs. Ferris, after being introduced by the Dean, presented the prizes.

The meeting was carried out in an atmosphere of complete informality, and while the more serious events received the attention they deserved, the less serious ones, particularly the slow bicycle race, and the three-legged race, caused much amusement.

The smooth running of the event, was largely due to the efforts of the local secretary of athletics, Mr. H. C. Martin; he is to be congratulated on winning the mile handicap from scratch, and also on his organising ability.

RESULTS

100 *Yards.*—1. C. B. Clarke; 2. P. Harvey. Time, 10.9 sec.

440 *Yards.*—1. B. Wilson; 2. R. Woolcott. Time, 54-4/5 sec.

High Jump.—1. G. Wotton; 2. T. St. George, G. Chase, A. W. Bevis. Height, 5 ft. 2½ in.

Putting the Weight (16 lb.).—1. S. Clarke; 2. J. Elder. Distance, 31 ft. 3 in.

Obstacle Race.—1. H. Riphan; 2. A. W. Bevis.

Sack Race.—1. R. D. Emslie; 2. B. W. Pett.

220 *Yards.*—1. T. Lewis; 2. B. Wilson. Time, 24-4/5 sec.

One Mile Handicap.—1. H. C. Martin; 2. R. W. Merryweather. Time, 4 min. 48-1/5 sec.

Slow Bicycle Race.—Last. J. Everard; Next, R. Tipper.

Throwing the Javelin.—1. G. Wotton; 2. T. Lewis. Distance, 140 ft. 2 in.

Three-legged Race.—1. R. W. Merryweather, Miss Neame; 2. R. D. Emslie, Miss Wagner.

Long Jump.—1. C. B. Clarke; 2. J. Lewis. Distance, 18 ft. 4 in.

150 *Yards Handicap.*—1. A. A. Halamandres; 2. C. Vidot.

Tug-of-War.—Medical *v.* Dentals. Winners, Dentals.

Relay Race (440, 220, 440, 220).—Winners, 1. First-year Dentals; 2. Clinicals, Pembury.

Cricket

GUY'S *v.* RICHMOND TOWN C.C.

Played at Richmond, Saturday, June 1st.

Guy's

A. V. Hurst, c. Compton, b. H. Shearcroft	13
H. A. Thomas, c. H. Shearcroft, b. G. Shearcroft	15
L. G. Morey, b. Compton	26
D. N. Fuller, c. Baker, b. G. Shearcroft	38
S. N. Cole, c. Smith, b. G. Shearcroft	0
J. W. A. Crabtree, run out	0
R. Wadia, b. G. Shearcroft	0
G. H. Pearson, b. G. Shearcroft	2
D. W. Burgess, c. H. Shearcroft, b. G. Shearcroft	0
J. P. H. Ogilvie, not out	7
D. Wright, l.b.w. b. Baker	2
Extras	9
Total	112

Richmond Town C.C. 231 for 5.

Richmond won by 8 wickets.

GUY'S *v.* BROMLEY C.C.

Played at Bromley, Saturday, June 8th.

Scores.—Bromley, 157 (N. Catchpole, 63).

Bowling.—Knight, 3 for 41; Morey, 2 for 6; Clarke, 3 for 51; O'Gorman, 2 for 20.

Guy's

G. O'Gorman, c. and b. Yolland	21
A. V. Hurst, b. Yolland	35
C. L. T. McClintock, b. Yolland	4
L. G. Morey, c. and b. Catchpole	20
C. B. Clarke, not out	51
J. D. Whitehouse, l.b.w. b. Summers	32
Extras	2
Total for 5 wickets	165

S. N. Cole, J. Pinching, S. A. Coffey, D. W. Burgess and J. H. H. Knight did not bat.

Guy's won by 5 wickets.

Hospital Information, etc.

Pass List

SOCIETY OF APOTHECARIES OF LONDON.
FINAL EXAMINATION.
June, 1940.

Surgery.

*K. W. N. Palmer *R. West

Medicine.

*G. T. Hammond

Forensic Medicine.

*G. T. Hammond

* Have now completed the examination.

Papers by Guy's Men

Handley, W. Sampson. Improved outlook in X-ray Carcinoma. *Lancet*, 1940, i, 1122.

Moffatt, P. M. Traumatic asphyxia with optic atrophy. *Proc. Roy. Soc. Med.*, 1940, **33**, 516 (Sect. Ophthalmol.).

Fripp, A. T.—(1) Congenital dislocation of left hip: Perthes' disease of right hip. (2) Hyperparathyroidism in a patient with infantile Coxa vara. *Ibid.*, 530, 531 (Sect. Orthop.).

Hurst, Sir Arthur. Discussion on functional deafness. *Ibid.*, 463 (Sect. Otol.).

Symonds, C. P. Delayed traumatic intracerebral hæmorrhage. *Brit. Med. J.*, 1940, i, 1048.

Kark, Robert, and another. Synthetic vitamin K in treatment of Hypoprothrombinæmia. *Lancet*, 1940, i, 1149.

Fry, W. Kelsey. Gunshot wounds of the Jaw. *Medical Press*, 1940, **203**, 524.

Northfield, D. W. C. Head injuries. *Practitioner*, 1940, **145**, 41.

Changes of Address

E. K. Breakspear, L.D.S., R.C.S., 52, Riversfield Road, Enfield, Middlesex.

P. W. Clarkson, Major R.A.M.C., 38, North Grange Road, Leeds.

R. S. Cook, L.D.S., R.C.S., East Meads, Onslow Village, Guildford, Surrey.

H. J. Croot, Major R.A.M.C., 29th General Hospital.

James B. Hine, L.D.S., R.C.S., Longdene Lodge, Haslemere, Surrey.

J. W. Lee, L.D.S., R.C.S., c/o People's Bank and Trust Co., Westfield, New Jersey, U.S.A.

Births

DONALD.—On May 9th, 1940, at Hursley, Poole Road, Bournemouth, to Kathleen (*née* Redman), wife of J. Kenneth Donald, L.D.S., R.C.S.Eng.—a son.

PICKERING.—On March 24, 1940, at Palmyra Homestead, Claremont, Cape Town, to Dr. and Mrs. R. W. Pickering—a son.

Marriage

RILSTONE—BETTLEY.—On June 29th, 1940, at Norwood, Francis William Borlase Rilstone to Audrey Helen Bettley.

Death

WARR.—May, 1940, Victor Charles Warr, Capt. A.D. Corps, of wounds received in action.

EDS. { N.A.N. B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

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PASSIM

HERR HITLER has spoken once again; his words were well chosen, his expressions well timed, but beneath that insidious harangue one can observe, only too well, his warped mentality. He is an incessant schemer and, now that he is apparently at the end of his stream of conquests, he has seen fit to stop and talk things over with the world. The fact remains that we have been exposed to every conceivable kind of Nazi treachery, and now, benefiting by our bitter experiences of the past, we stand prepared for anything the enemy has to offer. There is no Mannerheim line in Britain; instead there are countless defence units on every acre of our island, making it well-nigh impregnable. The British Fleet, together with its recent French reinforcements, controls the seas; in the air, the British fighter has proven its superiority over the unstable mass-produced German machine. In addition, the Continent is now facing one of the most difficult winters in its history. It has been cut off from its financial and material resources abroad, it has been overrun by the Nazi scourge, so that all internal industry is virtually at a standstill, and, worst of all, famine is almost a certainty. Instead of advancing slowly, and consolidating its gains into a strong empire, Germany has speedily amassed a conglomeration of disorder and despair. Yes, Herr Hitler, well may you hesitate on the eve of war with Britain!

THE best holiday a man can have is to be happy and hard at work. No one will argue that these have not been difficult days for everyone; it is not easy to watch one's plans and career entirely upset. But the fate of the medical students and recently-qualified doctors has been a relatively good one. Not only have we been allowed to continue our work, but we have been offered every encouragement to do so, and the authorities have done all in their power to provide the necessary facilities. In the face of this good fortune comes the holiday season, the good weather and summer sports. It is a matter for debate whether whole bodies of people are entitled to stop work for a fortnight or a month and indulge in idle recreation; it would be natural to complain about the loss of personal freedom if the order came through to stick to our jobs until we have won the war. Rather than make an issue of this problem, let us follow the example set by our sector leaders and superintendents. If they find it necessary to work ceaselessly, then the least we can do is to behave in a similar fashion and so help them in their task of organisation. If this attitude is adopted, then it is likely that an occasional day or week-end holiday will be permitted whenever we wish it.

IT is very satisfactory to note the resumption of the evacuation system from Guy's Hospital. Now that treatment of the Dunkirk casualties has been adequately administered in the various Sector hospitals, they are all ready to cope with our long waiting lists of ill people that have been accumulating during the past weeks. Not only do the patients benefit by the early care of their respective diseases, but we, at the different points in the Sector, are able to practise the handling and transportation of stretcher and ambulant cases, which, one day, may prove to be valuable experience.

IT is with great pleasure that we welcome Matron MacManus back to our midst. She has made a complete and speedy recovery from her recent illness, and now, after a brief convalescence, she has resumed her important work of nursing administration. We all wish her good health and continued success.

Effort Syndrome

A Clinical Lecture delivered at Guy's Hospital on 28th June, 1940, by R. T. Grant, M.D.

GENTLEMEN,—The condition known as the Effort Syndrome becomes of special importance in time of war, for though it is not uncommonly met with in civilian practice in times of peace, it is rendered much more prominent by the stress and strain of military life and particularly of active service. Since many of you on leaving hospital will enter the services, and because the life of the whole nation is being organised on a war footing, it is necessary for you to have a clear conception of what we know of that state of unfitness best called the effort syndrome.

First of all, let me define what is meant by the effort syndrome; it is a condition which is known by a variety of other names such as the soldier's heart, irritable heart, disordered action of the heart (the D.A.H. of British Army terminology) and neuro-circulatory asthenia. The name, "effort syndrome," was applied to the condition during the last war by Sir Thomas Lewis because the evidence pointed to the conclusion that it is not a disease but a series of symptoms found in many different states. The other terms are objectionable because they imply the existence of disease, especially cardiac disease, and in this way lead to an unnecessarily serious prognosis on the part of the physician and undue apprehension on the part of the patient.

You all recognise the symptoms presented by a normal healthy man when he takes strenuous or prolonged exercise. The chief symptom is breathlessness which develops during the exercise and persists, though decreasing, after the exercise ends. With this he may have palpitation, or in other words, consciousness of the action of the heart, often with a sense of constriction or a bursting feeling over the heart and even actual pre-cordial pain when the effort is very severe. Other symptoms are giddiness, faintness and fatigue. The heart rate is increased and the blood pressure is raised; the cardiac impulse becomes diffuse and forcible, the sounds alter and systolic murmurs may develop. Respiration becomes rapid, the nostrils dilate and the accessory muscles are brought into play. After the exercise, aching of the limbs, tremulousness and exhaustion may be felt, and later there come stiffness in the muscles, lassitude and even actual malaise. To these physiological symptoms and signs, Lewis applies the term "physiological syndrome of effort." The term is used as a convenient description of the chief changes, subjective or objective, that are shown by the human body in its reaction to exercise.

Many patients suffering from a variety of diseases, present such a series of symptoms and signs, and the chief difference between them and normal subjects is the amount of exercise required to provoke the symptoms; the smaller the amount of work required, or in other words the poorer the exercise tolerance, the more severe the malady. Although the term "effort syndrome" expresses such a group of symptoms and signs independently of the manner in which they are brought about or the disease from which the patients may actually suffer, yet its use is restricted to those patients in whom the diagnosis of an underlying disease is not made.

It will be obvious to you from your experience in the wards and in the O.P. department that the effort syndrome is presented by several groups of patients. It is shown, for example, by those suffering from diseases of the heart, by those suffering from various infections (especially pulmonary tuberculosis), and by those who are convalescent from acute infectious illnesses. These patients have the "effort syndrome"; the term may be applied provisionally to their complaint, but it is put aside as soon as the nature of their underlying disease is recognised. There is a large group of patients with this condition, however, in whom no clear signs of disease are found on examination, nor on subsequent follow up; it is to this group that the name effort syndrome is properly applied. As Lewis points out, there is little doubt that in dealing with patients affected by the effort syndrome we are dealing with a very mixed group, of which there are four chief classes:—

(1) One of the largest groups is that of constitutional weakness—physical, nervous or both. In this group are many who show incomplete or imperfect development; many of the men are undersized and have flat or elongated chests.

(2) Another large group comprises those who may be regarded as exhausted by exposure, hard continuous work, disturbed sleep and the constant strain and jar to body and nervous system which active service causes.

(3) A third group is made up of patients suffering from delayed convalescence from acute illnesses such as rheumatic fever, pneumonia, pleurisy, dysentery, influenza or tonsillitis.

(4) The fourth group is composed of cases with actual though unrecognised infection, including incipient tuberculosis, local pus infections and infections of the intestinal tract.

In all these groups, breathlessness, fatigue and the other symptoms mentioned are induced by abnormally little effort. Further sub-division from the point of view of symptoms and signs is at present unworkable.

Such then is the general picture of the effort syndrome; let me now outline to you the way in which we have come to this conception of this state of ill-health. I have said that the term effort syndrome is applied to the condition in which a patient shows reduced tolerance to exercise, and in which no clear signs of disease are found to account for it. But many of these patients do present, in addition to the symptoms and signs already mentioned, abnormal physical signs in the lungs or in the heart. The heart signs are, for example, a diffuse apex beat, epigastric pulsation, extrasystoles and systolic murmurs at the apex and base. In the past, and even now, some or all of these signs have been and still are regarded as sufficient for a diagnosis of incipient, if not established, cardiac disease. For a long time there has been an impression that these patients are suffering from a cardio-vascular malady as other names applied to the condition indicate, namely, irritable heart and soldier's heart. The term irritable heart was invented by Da Costa during the American Civil War; he believed that it led to enlargement and failure of the heart. Similarly, there is the belief that the healthy heart can suffer damage as the result of strenuous or prolonged exertion, as is indicated for example, by the term athlete's heart and rower's heart or soldier's heart. This view was specially prominent in the last war, for these symptoms developed in men during strenuous training or active service. These impressions persist in spite of the weight of evidence against them. In the last war, the majority of the cases of effort syndrome were sent to hospital with the diagnosis of valvular disease of the heart. By the summer of 1918 no less than 70,000 soldiers reporting sick were classified as suffering from cardiovascular disease, and no less than 44,000 effort syndrome patients among them became pensioners. I well remember myself sending men off sick during the last war, and discharging them from the army, with a diagnosis of mitral regurgitation, aortic stenosis, cardiac dilation or heart strain because they presented the symptoms and signs enumerated above. It was only later, after the war, when I came to work with Lewis and to deal with large numbers of these patients that I came to realise the soundness of Lewis's views. It was because of the wastage of man power during the last war that the authorities started an investigation into the nature of the condition from which these soldiers were suffering. This investigation was carried out by Sir Thomas Lewis from 1916 to 1918 and led to the conception of the effort syndrome as I have just outlined it. It was realised then, that though effort syndrome cases formed a mixed group, no real evidence could be found that the patients were suffering from cardiovascular disease; stress was laid rather on infection as a predominating causative factor, either as an infection present, but unrecognised, or as a past infection from which the patient had never fully recovered.

At that time, however, the questions of paramount importance were those of treatment and prognosis with regard to the capacity for future military service. The most satisfactory method of treatment was found to be graduated physical training; the reaction of the patients to these graded exercises was eventually adopted as the chief basis for prognosis. As a result of this method of treatment, the general health of the patients was improved; although a number recovered completely, and although the general tendency of the effort syndrome was towards recovery, the majority of the patients progressed to a certain point only or showed no change, their health remaining impaired. The military record of the men on discharge from hospital established the soundness of this system of treatment and sorting and, moreover, supplied further evidence as to the relation of infection to the malady. Thus, in some patients, the ultimate discovery and treatment of a source of infection led to recovery; in a few, the more serious diseases such as pulmonary tuberculosis or heart disease made themselves evident. After the war the progress of a large group of these patients (over 600 in all) was followed for at least five years. It was desired to learn what would ultimately happen to these patients, how many would finally recover, in how many would definite diseases declare themselves, and what these diseases might be; in particular, how many of them would develop definite cardiac disease; would the death-rate in this group be more than that in the general male population of corresponding age? I may say at once that the results of this later investigation fully supported the earlier views formed during the war. Taking the group as a whole it was found that while a few recovered (15 per cent.), improved (18 per cent.) or became worse (3 per cent.),

the majority remained stationary (56 per cent.). The death-rate (2 per cent.) over the period was no more than in the general population of males of corresponding age. Serious disease occurred in 9 per cent., and the most frequent infection was found to be pulmonary tuberculosis. The incidence of pulmonary tuberculosis proved in fact to be 80 per cent. greater than in the general population of males over the same period. This again supports the view that in a considerable proportion of cases, unrecognised infection is the cause of the symptoms. Moreover, the incidence of pulmonary tuberculosis was greater in those patients who originally did show some abnormal but indefinite signs in the chest, such as adventitious sounds, diminished air entry or a local deficiency in expansion of the chest wall. Among such patients (they numbered 80 in the group) the incidence of frank pulmonary tuberculosis was 8.8 per cent., while among those whose chests originally were entirely normal, the incidence was only 2.9 per cent.

We turn now to the incidence of cardiac disease. If incipient cardiac disease were the underlying cause of the symptoms in any considerable proportion of the cases under consideration, then it would be expected to have declared itself unmistakably in an appreciable number of instances within a period of five years, and above all, to have declared itself chiefly among those cases originally presenting signs of possible cardiac involvement and among those with a history of rheumatic fever or chorea. Actually, however, it turned out that there was no material difference in the after-histories of those with (118 cases) and without (483 cases) a rheumatic history, not only as regards the incidence of cardiac disease, but as regards the general state of health and of the death-rate.

The same observations were found to be true for the 335 cases with some abnormal physical signs in the heart. An apical systolic murmur was present in 233 cases; in 208 of these the murmur did not radiate, in 25 it was loud and conducted to the axilla. A basal systolic murmur was heard in 79, in 71 the apex beat was diffuse and in 31 cases extrasystoles were reported. The incidence of cardiac disease was no more in those with (0.9 per cent.) than in those without (1.1 per cent.) these abnormal physical signs. The same is true for the groups with the individual physical signs. For example, of the group with the conducted apical murmur the proportion of men restored to health was as great as in any of the series; not one of them was found to be suffering from definite cardiac disease, and it is in this group, if at all, that the development of cardiac disease would have been expected. It seems clear from this evidence that incipient cardiac disease cannot be regarded as the underlying cause of the effort syndrome in anything but a negligible proportion of the cases. It follows, also, that whatever diagnostic significance be attached to those cardiac physical signs they may be neglected in giving a prognosis. It may be said that their chief value lies in directing attention more closely to the cardiovascular system for the detection of other and more definite signs of disease.

You may ask what diagnostic significance is attached to such cardiac signs and what are the reliable signs of cardiac disease in men of the recruiting age. To the first question I would reply that the diagnostic significance is uncertain. Take, for example, the apical systolic murmur. It is true that this murmur is among the signs of disease of the mitral valve but that by itself it is an uncertain sign. If you examine after death the hearts of patients who during life presented an apical systolic murmur but no other signs of cardiac disease, and who die from other causes, in a large number you will find the mitral valve normal. Again, if you take instances of advanced mitral stenosis where the mitral valve is altered to form a hard and unyielding ring which is not only obstructed but incompetent, then in about a third of those cases no mitral systolic murmur was heard during life. That is to say, you may have a mitral systolic murmur without apparent disease of the mitral valve which would cause regurgitation, and you may have a diseased mitral valve through which one must assume that regurgitation has taken place but without a systolic murmur. Similar observations on the other cardiac signs I have mentioned show that they too are uncertain and unreliable criteria of disease.

To the second question, what are the reliable signs of cardiac disease in men of the recruiting age? I would say:—

1. Breathlessness at rest.

2. Venous congestion.

3. Definite signs of cardiac enlargement.

4. Irregular action of the heart with a fast heart-rate.

5. A diastolic murmur at the base of the heart or down the sides of the sternum.

6. A low-pitched rumbling diastolic murmur at the apex.

7. A basal or apical thrill.

8. Hypertention—a B.P. of 180, or over, at rest.

Finally, when you come to deal with the effort syndrome from the "services" point of view, three chief problems arise. The first is how to keep cases of the effort syndrome out of the services, the second is how to reduce the number of cases of effort syndrome developing under training, and the third concerns the treatment and sorting for further duty of men with these symptoms. I have not time to deal fully with these questions, but briefly the answer to all these problems lies in the use of exercise. When a man enters the army he is supposed to be fit for heavy work. Now, you can't tell if a man is fit for heavy work by merely questioning him or examining him. The preliminary questioning may indicate that a man is or is not likely to stand up to heavy or prolonged work; a man who has been engaged in heavy manual work is more likely to be fit than a man who has followed a sedentary occupation. But experience shows that men apparently fit from this point of view do fail, while those who seem unfit later succeed. The preliminary physical examination will, or should, eliminate those with obvious disease that would make them unfit for service. The only way, however, to find out if a man is fit for heavy work is to give him heavy work to do. In order to assess so far as is possible a man's capabilities in this direction test exercises are used, and the reaction of the man to these exercises is compared with that of normal subjects. Many types of test exercises are, or have been, employed, but two examples which have proved generally useful may be given. The first is the relatively slight exercise of hopping 20 times on each foot (40 hops in all), the shoulders being raised about six inches at each hop. If, as a result of this test, the subject is materially breathless, the exercise tolerance is assessed as poor, and the subject is classified as Grade IV and either rejected as unfit or fit only for light duty. If he has a temporary infection which might adversely affect his exercise tolerance he may be referred for further examination at a later date. If the subject is not at all or only slightly breathless as a result of this simple test, a strenuous test is applied. This may consist, for example, of lifting a 10-lb. dumb bell in each hand from the floor and to the full reach of the arms above the head at the rate of one lift in two seconds. A healthy subject of sedentary habit is capable of lifting the dumb bells about 30 times without great breathlessness, and if a man reaches this his exercise tolerance is classed as good and the man is put in Grade I. If he becomes breathless after 20 to 30 lifts his exercise tolerance is assessed as fair and he is classed as Grade II. A man who fails to make 20 lifts without breathlessness is classed as Grade III.

Secondly, to prevent the effort syndrome developing during training, the training must be, made gradual. Recent experience in the army has shown how beneficial gradual training may be; it may convert unlikely subjects into efficient soldiers, whereas the older methods of the barrack square and long route marches will cause the same men to break down and become a loss and expense to the country.

Finally, for the grading and sorting of those who develop the effort syndrome in the army the same system of graded exercises is employed, and the man is finally disposed of, that is, returned to full duty, to light duty or discharged from the army according to his reaction to these exercises.

Those of you who are interested will gather further information in the following references :—

REFERENCES

T. Lewis. "Report upon soldiers returned as cases of 'disordered action of the heart' (D.A.H.) or 'valvular disease of the heart' (V.D.H.)." Medical Research Committee, Special Report No. 8, London, 1917.

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T. Lewis. "The Soldier's Heart and the Effort Syndrome." 2nd Edition, London, 1940.

Nursing News from Orpington

Miss MacManus is now back at Boundary House. We are very glad she has had at last a much belated rest, even though under such unfortunate circumstances. We congratulate her upon her rapid recovery and welcome her back in our midst.

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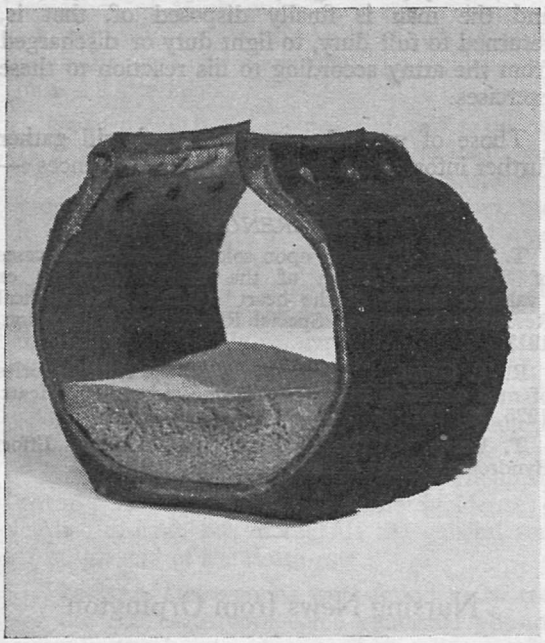
The Cowdray Scholarship offered by the Royal College of Nursing has been awarded this year to Miss Noel Surridge. Many of us still at Guy's remember she was the Gold Medallist for 1938. We congratulate her upon this further achievement and wish her every success.

A Simple Rubber Cushion for Walking Plasters

By E. R. Davies, Esq.

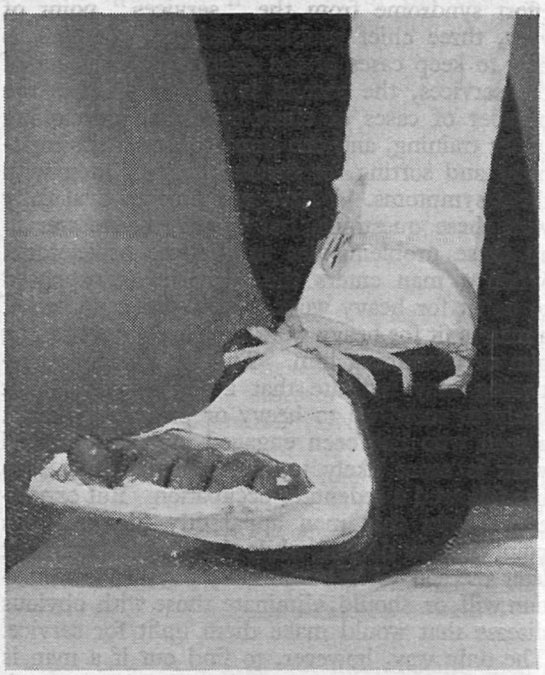
MANY injuries of the foot and the lower part of the leg are treated by immobilisation in plaster, and in a large proportion of these cases some apparatus is fitted to allow weight bearing. Walking irons, Bohler heels and Sorbo pads are commonly used, but each of these has certain disadvantages.

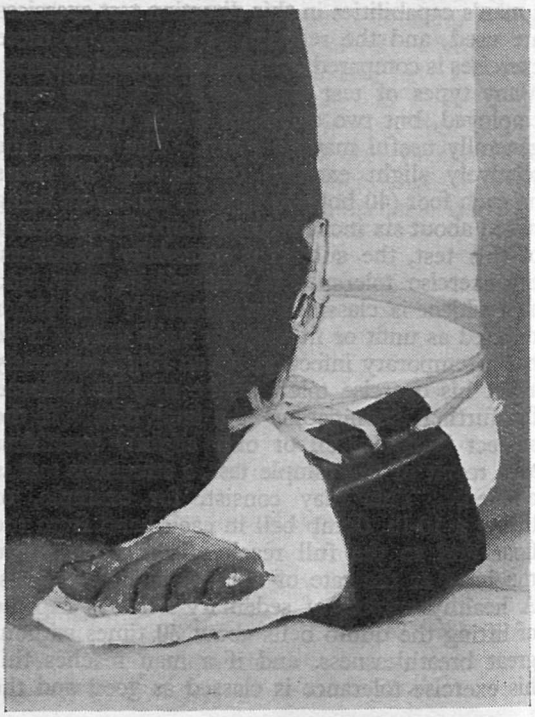
The attachment of irons, or heels, to a cast by further plaster bandages adds considerably to its weight, and the removal of the plaster is always more difficult. The most important disadvantage arises from the fact that they cannot be adjusted in position. In the majority of cases



the patient attends on the day following the application of the plaster for a routine examination, when arrangements are made for exercises, and the walking iron or heel is fitted. These are always rather awkward to walk on at first, but in many cases the best position for walking has not been obtained, and when the patient is next seen—often after two weeks have elapsed—he is found to be walking with a sharp external rotation of the foot at each step. If it had been possible for the patient to adjust the position of the iron this would not have occurred. The use of a Sorbo pad has been advocated to prevent this abnormal gait, but its attachment to the sole by plaster bandages is neither very adjustable nor durable.

A simple rubber cushion can be made with





a minimum of skill and equipment, combining the rocking action of the Bohler heel and the cushioning effect of the Sorbo pad, and it has also the great advantage of being adjustable in position. It has been used in the Fracture Clinic for a short time, and seems very satisfactory.

A segment is cut from an old motor tyre (size 4.50 by 18 is convenient), using a hack saw to cut through the wire at the beading, so that the width at the beading is $2\frac{3}{4}$ in., and at the tread $3\frac{3}{4}$ in. Three holes are punched through on either side just below the beading wire, using a $\frac{3}{8}$-in. recess punch. The inside is cleaned with glass paper, and a piece of 1-in. thick Sorbo rubber is stuck inside the tyre with ordinary rubber solution.

A football boot lace is used to attach the cushion to the plaster boot, being looped first round the back of the heel, and then laced through the holes across the instep.

Worn-out tyres of this size can usually be obtained for nothing, so that the total cost of the material is only 6*d*.—4*d*. for the Sorbo rubber and 2*d*. for the lace. Apart from its cheapness and the ease with which it is made, the other advantages are :—

1. The position is adjustable.
2. There is no extra weight of plaster necessary for attachment.
3. It can be cleaned and taken off at night—saving bedclothes.
4. It does not wear out, and can be used on several patients.
5. Final removal of the plaster is more easy than usual.
6. It is non-skidding; the Sorbo gives a cushioning effect; the patient walks without rotating the foot; and the slight extra clearance prevents the plaster breaking at the toe.

"America Revisited"

By W. H. Ogilvie, Esq., M.Ch.

(*continued*)

Tuesday, October 11th

At 9 a.m. Harris was doing a bone graft for an ununited fracture of tibia and internal malleolus. The patient was a traffic cop and the fracture the usual motor-cyclist's compound injury, except that, with reversed rule of the road, the injury was on the left. He cut a wide bevelled graft; the long bit he hammered under the compact bone at the lower end, hammered hard into its groove above, and fixed with one beef bone screw, for which he tapped a thread in the tibia. The short bit he divided into two grafts, which he hammered edge on into slots cut across the malleolar fracture. A nice job, firm as a rock. The assistant kept the saw cool by sprinkling saline on it with a syringe and needle—neat and effective.

Graham was doing the second lobe of a recurrent Graves's Disease—a very difficult job nicely done. Tied inferior artery well out. He then did a second goitre. He infiltrates the whole flap with novocaine, and makes an incision that, compared to our usual one, is rather transverse, high and short. He dissects up the flap, largely by blunt dissection with gauze. His attack on upper pole impressed me. He says vessels are always in front on inner side, and in very much the same position, however much the pole may go up and back behind the pharynx as it enlarges. He clears the sterno-thyroid well off the front, then gets the vessels above between two hæmostats and divides them, before mobilising the pole, using Lahey scissors for planes. In detail :—

(1) Opens forceps in thyro-laryngeal space inside pole.

(2) Clips vessels, two forceps on pole side, one on lobe side.

(3) Cuts with knife between second and third forceps.

(4) Puts finger inside pole, now free and dissects it loose outwards.

(5) Brings it forward, getting posterior branch.

(6) Ties vessels, usually using a curved needle.

After this there was a third thyroid, done the same way, which went very well. Inferior thyroid artery ligatured both sides.

Graham then showed a carcinoma of the rectum treated with diathermy. The growth had been an early projecting one on the posterior wall, but patient was a "dumb woman" who would not have a colostomy. Treated by coagulation and division of sphincters in front for access. Result clean white scar, with telangiectases, and sphincter control.

He told me about two cases of hypoglycæmia he had had. In the first he could find no adenoma, and removed all the pancreas except the head and neck. Her blood-sugar rose, but the attacks continued. She came next year, having changed from a skeleton to a mountain of fat. She was

still suffering from hypoglycæmic fits, but had been taking glucose almost continuously and put on 7 or 8 stone. With the experience of many Finney's operations he mobilised the duodenum and head of the pancreas together and, feeling the head between his fingers, found a small adenoma which he removed; result, cure. (Section of the body removed at first operation showed great excess of islet tissue.) In the second case he found an adenoma in the head at once. This woman was in continual fits, and they had to give her 200 c.c. of 50 per cent. glucose on the table before starting the operation. She had permanent cortical damage, and remains mental.

In a side ward was a case of peritonitis treated by continuous suction (Fig. 1).

Suction is continuous and the patient is allowed to drink as much as he likes.

A great advance is the (Miller-Abbott) double lumen duodenal tube (Fig. 2). This is 10 ft.

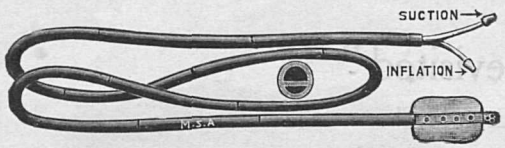


Fig. 2.—The Miller-Abbott tube

long, ending in a metal bulb like the Einhorn. Round the tube just above the bulb is a thin rubber bag inflated through the second opening. The tube is passed through the nostril like a Ryle, and joined up to continuous suction. When the metal end is in the duodenum, the balloon is inflated and is then passed on by peristalsis. As each section of intestine is emptied of its contents, the tone of its wall recovers, peristalsis is resumed and the balloon and bulb are passed on to the next section. More tube is fed in and the bulb will finally appear at the anus if left long enough. The Miller-Abbott tube is said to be a real life saver, and will make an unrelieved mechanical obstruction feel so well that operation may be thought unnecessary. I bought one to try.*

Harris was repairing a large umbilical hernia with a fascial graft. He has designed a reverdin needle for this that works well—large eye, blunt point, square shank to prevent rotation. The fascia cutter is Wilson's, an angled eye with a guillotine knife closed by a screw (Fig. 3). He had two lovely strips, but when he tried a third to show me, the usual ragged wisp appeared.

I spent the afternoon between Boyd in the pathological museum, and Lewis. Boyd is reorganising the museum to improve its teaching value. A series of small rooms are devoted to a subject apiece, and in each various aspects of the subjects are grouped. For instance, a type

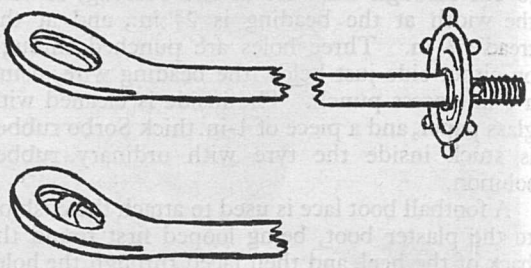


Fig. 3.—Wilson's Fasciatome

specimen in a watch glass type of jar, microscopic slides, X-rays, photographs of patients, coloured drawings from *B. J. S.*, a portrait of a man associated with the disease (*e.g.*, Bright and Addison), with a short sketch of his life—all these would be grouped, the specimen inclined at 45 deg. for easy inspection, the description in a little slot below it. He has a wonderful lecture theatre, with the best epidiascope I have ever seen, able to project wet specimens in their depth, and a lantern that can throw microscopic slides and change up the magnification to near oil immersion size without any stop; the lenses and condensers are fixed together, and slip in turn to where slide and light beam are.

Lewis has a fracture table of his own design, on which plates can be taken, and where he can aim a Smith Peterson pin by rigid guides X-ray controlled, so that it can be driven in centrally without any further checking.

In the evening Eddie Robertson gave a large dinner party, a very cheery show. Afterwards he showed a colour film that he had taken on a recent aeroplane trip to the Arctic. Starting from Alberta, a region of fields, woods and farms, they passed up over tracts where pine forests stretched unbroken for hundreds of miles, with lakes outlining the valleys. Further north came the gold and radium mines, set in a region of rocks, pines and lakes, where there are no roads or railways, and the only communication is by planes, fitted with floats in the summer and skis in the winter. From the northernmost mine, they flew north still, over ground becoming more and more desolate, no trees but just water and rocks covered with tundra—a moss. This is the region

* I have used my Miller-Abbott tube in three desperate cases. In the first two it failed to get beyond the pylorus in time. In the third, a week-old general peritonitis, nearly moribund, the tube entered the duodenum about 8 p.m. when the pulse was 160 and barely perceptible. The bulb was then inflated. By next morning 5½ pints of foul fluid had been withdrawn, the abdomen was flat, the pulse was 120, and the patient felt he was going to live, and did.

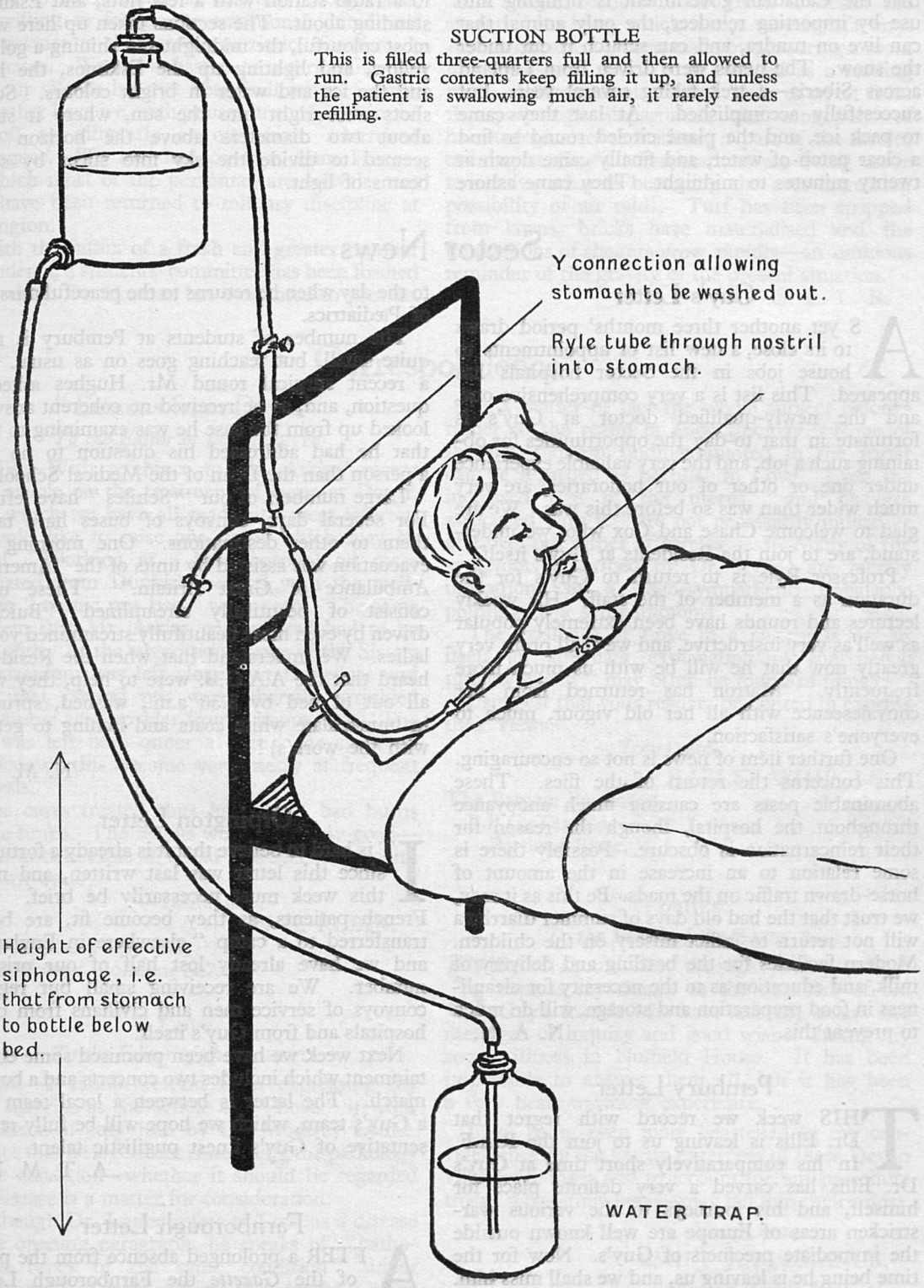

SUCTION BOTTLE
This is filled three-quarters full and then allowed to run. Gastric contents keep filling it up, and unless the patient is swallowing much air, it rarely needs refilling.
Y connection allowing stomach to be washed out.
Ryle tube through nostril into stomach.
Height of effective siphonage, i.e. that from stomach to bottle below bed.
WATER TRAP.

Fig. 1

that the Canadian government is bringing into use by importing reindeer, the only animal that can live on tundra, and can scratch it out under the snow. The herds were driven from Lapland across Siberia—a trek taking several years, but successfully accomplished. At last they came to pack ice, and the plane circled round to find a clear patch of water, and finally came down at twenty minutes to midnight. They came ashore to a radio station with a few huts, and Eskimos standing about. The sections taken up here were most colourful, the midnight sun shining a golden yellow, and lighting up the Eskimos, the huts and the ice and water in bright colours. Some shots were right into the sun, where it stood about two diameters above the horizon and seemed to divide the sky into slices by solid beams of light.

Sector News

Guy's Letter

AS yet another three months' period draws to its close, a new list of appointments to house jobs in the Sector hospitals has appeared. This list is a very comprehensive one, and the newly-qualified doctor at Guy's is fortunate in that to-day the opportunities for obtaining such a job, and the very valuable experience under one or other of our honoraries, are very much wider than was so before this war. We are glad to welcome Chase and Cox who, we understand, are to join the Residents at Guy's itself.

Professor Ryle is to return to Guy's for the duration as a member of the staff. His weekly lectures and rounds have been extremely popular as well as very instructive, and we shall profit very greatly now that he will be with us much more frequently. Matron has returned from her convalescence with all her old vigour, much to everyone's satisfaction.

One further item of news is not so encouraging. This concerns the return of the flies. These abominable pests are causing much annoyance throughout the hospital, though the reason for their reincarnation is obscure. Possibly there is some relation to an increase in the amount of horse-drawn traffic on the roads. Be this as it may, we trust that the bad old days of summer diarrhœa will not return to inflict misery on the children. Modern facilities for the bottling and delivery of milk, and education as to the necessity for cleanliness in food preparation and storage, will do much to prevent this.

N. A. N.

Pembury Letter

THIS week we record with regret that Dr. Ellis is leaving us to join the R.A.F. In his comparatively short time at Guy's Dr. Ellis has carved a very definite place for himself, and his journeys to the various war-stricken areas of Europe are well known outside the immediate precincts of Guy's. Now for the time being he is leaving us, and we shall miss him. We wish him the best of luck and look forward to the day when he returns to the peaceful pursuits of Pædiatrics.

The number of students at Pembury is now quite small, but teaching goes on as usual. At a recent surgical round Mr. Hughes asked a question, and, as he received no coherent answer, looked up from the case he was examining to find that he had addressed his question to no less a person than the Dean of the Medical School!

Large numbers of our "Seniles" have left us. For several days, convoys of buses have taken them to other destinations. One morning the evacuation was assisted by units of the "American Ambulance of Great Britain." These units consist of beautifully streamlined "Buicks," driven by even more beautifully streamlined young ladies. We understand that when the Residents heard that the A.A.G.B. were to help, they were all out of bed by 5.30 a.m., washed, spruced, in immaculate white coats and itching to get on with the work(s)!

N. M. J.

Orpington Letter

IT is hard to believe that it is already a fortnight since this letter was last written, and news this week must necessarily be brief. Our French patients, as they become fit, are being transferred to a camp "elsewhere in England," and we have already lost half of our original number. We are receiving small but regular convoys of service men and civilians from coast hospitals and from Guy's itself.

Next week we have been promised some entertainment which includes two concerts and a boxing match. The latter is between a local team and a Guy's team, which we hope will be fully representative of Guy's finest pugilistic talent.

A. T. M. R.

Farnborough Letter

AFTER a prolonged absence from the pages of the *Gazette* the Farnborough Letter rather diffidently presents itself anew,

hoping to be received as was the prodigal son, but willing to forego the traditional fatted calf as a gesture to the current patriotic, if enforced, asceticism. We must hasten to assert, however, that our silence has not been indicative of sloth, but rather have we, with praises unsung, continued to toil as diligently as our more advertised colleagues. We too, had convoys from France, of which most of the personnel are convalescent and have been returned to military discipline at Orpington.

With the influx of a fresh and greater number of students, a students' committee has been formed over which Dr. Forman has consented to preside. This should be able to do much to better the students' lot here, which is not very satisfactory. A start has already been made by procuring a room in the hospital which is to be used as a reading room. Efforts are also being made to wrest from the pathology department the monopoly of hæmatological examinations, a part of the former training at Guy's. Preparations are being made to receive what is becoming the ever-increasing possibility of air raids. Turf has been stripped from lawns, bricks have materialised and the foundations of shelters grow rapidly—an ominous reminder of the gravity of the present situation.

G. L. L. R.

Correspondence

"Lessons from Dover"

To the Editor of the GAZETTE

SIR,—With reference to Mr. Atkins' recent article on the treatment of cases at Dover, which we have all read with great interest, I should like to raise one point which may be useful. Working at a base hospital on cases evacuated from Dunkirk, several with the well-known "tannic pus bag" were seen. The same problem that Mr. Atkins encountered had to be dealt with. At the suggestion of one of the Sisters the coagulum was left alone, but the edges and holes that poured pus were liberally sprinkled with tannic acid powder from a pepper pot. The part was left bare under a cage; the sheet on the floor of this became very messy at frequent intervals.

The cases treated thus have been bad burns on the limbs. The results were extremely good—to me unbelievable if I had not seen them with my own eyes.

Yours, etc.,
IAN G. ROBIN.

Royal Northern Hospital,
Holloway, London, N.7.

"Love"

To the Editor of the GAZETTE

SIR,—I cannot refrain from expressing my surprise at the article on "Love" in your issue of July 13th by Dr. Modfrey Lynne. I notice that he is reticent concerning the pathology of the condition—whether it should be regarded as a disease is a matter for consideration.

Although Dr. Lynne refers to Love as a disease in his opening paragraph, he speaks of "pathological types of the same condition" under "Ætiology." Surely if Love is a *disease* it must be pathological.

As a matter of fact the whole subject belongs rather to the realm of endocrinology. None of the post-mortem findings quoted in the paper can be regarded as peculiar to Love. Even the increased size of the uterus "and changes associated with it" are not necessarily indicative of Love, but rather of carelessness. Many of the symptoms described by Dr. Lynne are merely indications of a vago-sympathetic unbalance pointing to a sympathotonia.

The existence of Love in a patient is not in itself an adequate explanation of the pelvic tumour which "may often be found in females."

I suggest that your readers be invited to express their views.

Yours, etc.,
HARLEY WIMPOLE.

The Bargain Basement,
B.B.C. Terrace,
Portland Place, W.1.

"Thanks"

To the Editor of the GAZETTE

SIR,—I should like, through your paper, to express my thanks to the numbers of old Guy's friends who have sent me letters and messages of inquiry and good wishes during my recent illness in Nuffield House. It has been impossible to answer them all, but it has been a very heart-warming experience.

I am being even more heartened in my convalescence by the sturdy eagerness of these Devon villagers to meet, and to account for, any parachute troops who—they hope—may fall into their midst.

Yours, etc.,
EMILY P. MACMANUS.
Matron, Guy's Hospital.

Ottery St. Mary, Devon.

Hospital Information, etc.

Pass List

CONJOINT BOARD

FINAL EXAMINATION

July, 1940

Pathology

G. J. Amiel
L. Rendall-Baker
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E. B. Dawe
J. L. G. Hartley
J. C. Holman
J. T. M. C. Jenkins
H. P. Jones
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R. U. F. Kynaston
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S. Muntarbhorn
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P. M. Swift
St. J. M. A. Tolhurst
W. R. Watson
P. C. van der Westhuizen
J. Williams

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*J. C. Bulstrode
*D. W. Burnford
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*A. G. C. Cox
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G. E. McFall
G. McVicar
E. Robinson
B. Rowlatt
G. P. A. Sechiari
J. S. Stead
J. A. Williams

* Have completed the examination.

SOCIETY OF APOTHECARIES OF LONDON

PRIMARY EXAMINATION

July, 1940

Anatomy

J. M. Thomas

Physiology

J. M. Hanson
J. M. Thomas
R. Webb

UNIVERSITY OF OXFORD

The following degrees have been conferred :—

Bachelors of Medicine

P. R. Cooper
G. L. L. Reynolds
R. G. Thomas

Master of Arts

P. R. Cooper

Awards

The *London Gazette* of July 11th contained the names of the following Guy's men :—

M.B.E. (Military).—Edmund Gillett, Lt. (Acting Major) R.A.M.C., for distinguished services in the field.

Military Cross.—Mark John Lindsey, Lt. (Temporary Capt.), R.A.M.C., and Frederick Morley Smith, Lt. R.A.M.C., for gallant and distinguished services in action.

Papers by Guy's Men

Maizels, M. and others. Transfusion of fresh and stored blood. *Brit. Med. J.*, 1940, ii, 48.

Exner, G. G. Modern splinting of mandibular fractures. *Brit. Dent. J.*, 1940, **69**, 45.

Hurst, Sir Arthur. Hæmatemesis and its treatment. *Med. Pr.*, 1940, **204**, 50.

Ryle, John. Penetrating wounds of the chest : Experiences in the last war. *Lancet*, 1940, ii, 63.

Changes of Address

R. W. F. Brotherton, Lt. A.D. Corps, 52nd General Hospital.

J. N. Hunt, Surg.-Lt. R.N., Chatham.

D. P. King, Major R.A.M.C., 29th General Hospital.

F. H. Dodd, M.R.C.S., L.R.C.P., Walton Elm, Sturminster, Newton, Dorset.

W. N. Mann, Lt. R.A.M.C., H.M.H.S. *Dorsetshire*, c/o G.P.O.

Marriages

LUNN—WRIGHT.—On July 6th, 1940, at St. Martin's Church, East Horsley, Henry Fletcher Lunn, R.A.M.C., elder son of Mr. and Mrs. H. G. Lunn, to Agnes Rosalind Wright, younger daughter of Rev. and Mrs. W. J. Wright, of East Horsley, Surrey.

ROUTLEY—BARNETSON.—On July 1st, 1940, at Duddington Kirk, Edinburgh, Paul Edwin F. Routley, to Barbara Uquhart Barnetson.

WAKEHAM—COOPER.—On July 5th, 1940, at Southwark Cathedral, John Yabsley Daniel Wakeham, to Monica Louise Cooper.

O'KEEFE—PEGUM,—On June 17th, 1940, at Our Lady of Victories, Kensington, S.W.8, John Patrick O'Keefe, Lt. R.A.M.C., to Constance Mary Pegum.

YATES—THOMAS.—On Saturday, 22nd June, 1940, at Ealing, John A. Yates to Jean Cockcroft Thomas.

Birth

BLAZEBY.—On July 15th, 1940, at Lashams Lea, Witley, near Godalming, Surrey, to Maryl (née Crutchley), wife of Dr. Henry Blazeby—a son.

Deaths

LULHAM.—On July 4th, 1940, at Haven, Hurstpierpoint, Sussex, E. P. Habberton Lulham, M.R.C.S., L.R.C.P., age 75.

MURRAY.—On July 14th, 1940, at 11, Greenhills Road, Cheltenham, Robert William Murray, F.R.C.S., O.B.E., late of Liverpool.

SHEPPARD.—On July 17th, 1940, in Bright Ward, Nellie Sheppard, 40 years Head Dressmaker at Guy's Hospital.

Eds. { N.A.N. B.S.L.

GUY'S HOSPITAL GAZETTE

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PASSIM

OUR Prime Minister has recently thought fit to warn the nation that this country still stands in as imminent peril of invasion as it ever has done in the past. It is doubtful whether there was any real need for such an announcement. The fact of its utterance is in itself a tribute to the calmness with which the country has set itself to prepare for the severest trials of its existence. August is traditionally our holiday month, but there seems to be no evidence of any slackening in the stupendous national effort for self-preservation. The surface enthusiasm which was manifest when invasion seemed to be but a matter of hours may no longer be so prominent, but there can surely be no recurrence of the feeling of inertia which was so widespread during the first six months of the war. At the same time, it is equally important that adequate periods of relaxation should be provided for one and all in order that efficiency be maintained; not only does overwork produce physical fatigue that is harmful in itself, but the inevitable monotony endured by hundreds of thousands of workers, produces a mental strain that can only be countered by reasonable rest periods. The importance of this factor, in maintaining our war industries at their highest pitch, has been recognised by the appropriate authorities and control, is to be exercised over hours of labour, when necessary.

OUR base hospitals have been fortunate in that, for a brief period, they received experience of conditions similar to those in anticipation of which the Emergency Medical Service was evolved. At Guy's, we have still to rest content with such A.R.P. rehearsals and practices as are offered to us. On the other hand, the maintenance of our normal public health services, both in the Borough and throughout the Sector, and the preservation of the Hospital as a teaching unit, provides us with an abundance of congenial work. All of us perhaps ,are not able to work at capacity, but there can be no excuse for boredom. The efforts made by our authorities to provide short periods of qualified leave wherever practicable are to be considered therefore, as both longsighted and generous.

THE recent election of a fresh group of house-officers to the Sector has produced the complaint that the interchange of officers between Guy's and the base hospital does not occur with the frequency that was at first envisaged. The normal period, for which a houseman is elected, is one of six months; re-election, apart from the question of merit, must depend upon the relative requirements of the military and the civil authorities. It is doubtful if any full house appointment can be performed efficiently, and the full value obtained from it, if the officer holding the post is elected to it for any shorter period. In pre-war days at Guy's, nine months' experience was necessary before a full house physician or surgeon appointment was obtained. Under present conditions, many more appointments to the Sector are made each three months than could be made to Guy's in the old days, and a large proportion of these carry the benefit of close contact with members of our own honorary staff. Although the number of beds controlled by each houseman is generally less than in the pre-war era, so too is the experience that each possesses when he takes up his appointment, and he has to work all the harder to derive full benefit from it. No advantage would appertain to any individual if any more frequent circulation from post to post or hospital to hospital were to be introduced, and most probably the standard of efficiency would fall. The actual elections

to house appointments are made, as before, by a committee composed of members of our honorary staff, and the allocations of these appointments throughout the Sector are made by a smaller committee.

WE print in this number an account by a doctor of the conditions existing in France following upon the evacuation of Paris. Whilst perhaps of little medical interest, this account is instructive in so far as it reveals the apathy, or maybe the bewilderment of the peasantry of the country towards the invasion; it emphasises, moreover, the hollowness of that "military" victory won against an almost complete absence of opposition in the final stages.

Pyrexia of Unknown Origin

A Clinical Lecture delivered at Guy's Hospital July, 1940, by A. H. Douthwaite, M.D., F.R.C.P.

GENTLEMEN,—A biennial approach to the problem of cryptic fever is made unashamedly. The matter is too often a source of deep concern to practitioners of medicine and surgery to allow any generation of students to pass it by.

I shall not discuss unexplained fevers of a few days' duration, for by doing so I should include almost all pyrexial illnesses in that they may puzzle us in their initial stages. Our real task is to examine the method of investigating those patients whose presenting, and possibly only, symptom is that of a raised temperature lasting for at least a week without the development of physical signs to explain its occurrence.

Cabot, analysing 1,000 cases of long-continued (*i.e.*, two weeks or more) fevers, finds that 92 per cent. were due to typhoid, tuberculosis or sepsis. The strong probability is, therefore, that any pyrexial patient you meet will be suffering from a disease recognisable within a day or two at the longest, provided that the mode of approach is correct.

In descending order of importance, this comprises history-taking, examination, blood count, bacteriology, including agglutination tests, and X-rays.

It is a truism to say that the longer one practices medicine the more attention does one pay to the taking of a history. Nowhere is this more apt than in investigating pyrexia. Furthermore, it is the first definite symptom which is usually all-important in at least locating the area of the body primarily at fault. I need only remind you of the boil which may precede staphylococcal fever, the sore throat which heralds streptococcal fever, the often transient vomiting and epigastric pain of acute appendicitis, to illustrate a point which, in spite of its exceptions, is nevertheless fundamental. Let me give two brief illustrations:

A man of 50 years had been feverish for ten days and had no other symptoms after the first day. The onset of the illness was characterised by diarrhœa (eight liquid motions in 24 hours), a single vomit and epigastric discomfort. No cause had been discovered. The white cell count was 10,000 with 72 per cent. polymorphs on the tenth day. A general examination, including that of the rectum, revealed no abnormality. The initial symptoms, however, pointed to the lesion being abdominal. The blood count suggested a common pyogenic organism. These facts, taken in conjunction with the history, indicated a likelihood of appendicitis. There are two positions where an acutely-inflamed appendix may be overlooked—the pelvis (in this case R.E. negative) and the retrocæcal area. By pressing deeply into the right lumbar region tenderness and muscular resistance were noted. A retrocæcal appendicular abscess was eventually drained.

The second case is a story of failure. A middle-aged man, after six days of vague malaise, experienced a sharp pain at the umbilical level. This persisted, though not intensely, for two days, and was completely and permanently relieved by a bout of diarrhœa. Fever was noted at this time of remittent type, running from 99 to 102 deg. or less. His doctor found no localising signs of disease and called in a surgeon. He was satisfied that the case was not a surgical one. Gradually the abdomen became distended and tympanitic. The clinical picture suggested infection with organisms of the typhoid group. At the end of the second week there was a leucocyte count of 12,500, with 82 per cent. of polymorphs, however, and agglutination tests were negative then and subsequently. Repeated rectal examinations were likewise negative. The patient came under my care in the third week. Leucocyte count was 8,000, with 69 per cent. polymorphs. There was some fulness of the abdomen, a red, dry, clean tongue and tenderness along the liver edge. Another physician whose help I sought was also doubtful of the diagnosis. He suggested tuberculous peritonitis. Only a weak reaction was given to the Mantoux test (1 : 1,000). This was now the fourth week of the disease. The spleen became palpable for a few days. There was no ascites. There had been shivering. I mention this point because uncomplicated tuberculosis very seldom causes rigors. A third physician saw him and also failed to come to a conclusion, but favoured tuberculous peritonitis. After two weeks of observation he was returned to his doctor, still as a case of P.U.O. This lamentable state of affairs was eventually brought to an end in the ninth week of the disease, by yet another R.E. by the general practitioner. He found tenderness and resistance high up on the right side. The surgeon who first saw the patient was again summoned. He operated and removed an inflamed, ruptured, appendix, which was adherent to the rectum. Local peritonitis was evident. The patient succumbed.

The lesson to be drawn from this is that, as an abdominal lesion was certain, and the typhoid group excluded, tuberculosis unlikely, and as the leucocytosis and shivering suggested an ordinary pyogenic infection, the abdomen should have been opened long before.

On the matter of examination I wish to stress the importance of seeing the whole surface of the body (erythema nodosum may be overlooked) and palpating for enlarged glands, tender points in muscles or subcutaneous tissue or bone, rectal examination, vaginal examination with the aid of a speculum, and special observation for signs of hyperthyroidism.

Reasonably accurate blood counts should be within the scope of all of us. There is no special investigation of greater value in the study of cryptic fevers. On a previous occasion I stated that a polymorph leucocytosis excluded a big group of causes of pyrexia, *e.g.*, typhoid, paratyphoid, tuberculosis (except probably the miliary form), influenza and malaria. I was subsequently taken to task by an eminent pathologist for this heresy, and feel that I must partially retract this statement. Admittedly a polymorph leucocytosis may occur in the typhoid fevers. The last three patients I have seen with enteric fever gave counts of 8,000 (polymorphs 60 per cent.); 8,000 (polymorphs 65 per cent.; in two days rising to 12,000 and 83 per cent.); 8,000 (polymorphs 54 per cent.). The facts remain, however, that considering the height of the temperature (103 to 104 deg. F.) when these counts were taken, the degree of leucocytosis, except for the 12,000 figure, was trivial compared with what one might expect from any of the pyogenic organisms. In point of fact, a leucopenia due to reduction of polymorphs is the rule, but by no means an absolute one. Leukæmia and glandular fever may also cause prolonged pyrexia, though the distinction between the two by blood examination may well need the help of an expert. It is not so generally appreciated that pernicious (Addisonian) anæmia may also present pyrexia as its chief manifestation. Especially in elderly people have I found this to be so without the more arresting signs with which we are familiar.

After the first ten days of fever agglutination tests, especially in the search for typhoid, paratyphoid and minor members of the food-poisoning group, may be invaluable. Much earlier in the disease the bacteriological examination of blood, urine and fæces may clinch the diagnosis. Never be diverted from the diagnosis of typhoid fever, when its existence is probable from clinical evidence, by the statement that preventive inoculation has been carried out. I saw severe typhoid contracted by a lady five weeks after such inoculation, and again recently in a patient who had had prophylactic injections on four occasions in the last eight years. The last one had been a year ago. The oyster season produces a crop of typhoids.

The main value of X-rays in investigation of obscure pyrexia is in the search for pulmonary tuberculosis. Here the early symptoms often do not indicate the system involved. X-ray examination of the chest should be performed, unless there is strong reason to believe that neither tuberculosis nor Hodgkin's disease could account for the temperature.

The following classification of causes of prolonged fever is helpful:—

(1) *Endocrine.*—Hyperthyroidism in the absence of sweating, tremor, exophthalmos, and goitre may readily be overlooked. An irregular, slight, pyrexia, loss of weight, unstable pulse rate, and a transitory stare, especially on first encounter, will suggest a diagnosis which can usually be confirmed by B.M.R. estimation.

Certain obese patients likewise exhibit pyrexia, which disappears with reduction of weight. Their inclusion in the endocrine class is tentative. It has been suggested that the bouts of fever of the very fat represent an effort of metabolism to consume the overwhelming adoposity. Of greater practical importance is the pyrexia which may continue for many months in children who have been immobilised in the first place for some pyrexial illness. The examples I have seen, have been in those confined to bed for rheumatic fever or for tuberculous glands. All signs of the original disease had disappeared. The patient had put on weight, largely by the accumulation of "podgy" fat; a pasty-faced, bulky, child was the result. Reduction of carbohydrate intake, resumption of activity, or exposure of the body to sun and fresh air banished the fever in a few days to a few weeks.

(2) *Toxic.*—Growths and drugs are the important members of this group. Rapidly-growing malignant tumours are especially liable to cause pyrexia. I have seen an eight weeks' remittent fever in a man of 33 years suffering from a fungating carcinoma of the œsophagus. The relatively slow pulse suggested at first staphylococcal fever. There was no dysphagia. Growths invading the liver are prone to cause fever. One of the most persistent cases of low-grade pyrexia I have met proved to be due to a slowly-growing ovarian cyst. Many drugs may cause pyrexia, but only those which are in such frequent use as to be most often overlooked need be mentioned, viz., phenobarbitone, alcohol, and amidopyrin. The

first may, after many weeks of immunity, cause high fever, nystagmus, and a morbilliform rash. The excessive consumption of alcohol, especially of "short drinks," often causes swelling and tenderness of the liver, furred tongue, flatulence, loss of appetite, and fever. This is not the pyrexia of cirrhosis, for it disappears within a few days of the exclusion of alcohol. Amidopyrin has been responsible for a great number of undiagnosed pyrexias and deaths. When it produces fever it has usually caused also agranulocytosis. It is contained in many proprietary drugs, *e.g.*, Allonal, and may, therefore, be completely overlooked as a fever-producing agent.

(3) *Cardio-vascular.* — The prolonged fever which may follow cardiac infarction; leukæmia, agranulocytosis, and pernicious anæmia deserve special mention as an occasional cause of diagnostic difficulty. A slight elevation of evening temperature with no localising signs, and symptoms persisting beyond two or three days after operation, especially abdominal, should be regarded as a warning of the grave event of pulmonary embolism.

(4) *Cerebral.*—The organic lesions are usually obvious. I can confine myself, therefore, to anorexia nervosa, nervous pyrexia, and malingering. The interest of the first is that fever is indeed possible in an emaciated, starved, yet over-active self-victimised psychopath. Yet such is indeed the case even within a few weeks of death. It is not seen if the patient has taken to bed. A true nervous pyrexia does exist, but is very rare. It is encountered most often in children who have been ill, and occasionally in hysterical women (all possibility of malingering having been excluded). By far the commonest cerebral pyrexia derives from the desire to feign illness. It occurs, therefore, chiefly in hysterics. Suspicion should be aroused by the absence of loss of weight, anæmia and all other signs of disease from a patient alleged to have been pyrexial for weeks. Again dramatisation is seldom lacking. The langour, closed eyes, feeble, plaintive voice all so unnecessary to continued fever, should direct your attention to the possibility of shamming. In such cases take the rectal temperature yourself, keeping your hand on the thermometer the whole time. It will be found to be normal, for even the most skilful hysteric cannot elevate the mercury by anal contortions as she can by tongue movement. If the patient feign stupour, a whispered conversation in the room will seldom fail to procure a turning of the head, or a furtive opening of the eyes, in order to satisfy the intense curiosity of the hysteric. Never accuse the patient of malingering in the presence of others. Do so when you have her to yourself. This will enable her to "save face," and some suitable, though not strictly accurate, explanation of the illness to relatives is surely justifiable.

(5) *Infective.*—I need only remind you of Cabot's 92 per cent. to impress upon you the importance of this group. He, however, was concerned with prolonged fever and not necessarily with cases where the diagnosis was not offered by careful history-taking and examination. We are occupied with the *obscurity* of causation, and with this as a criterion the following figures may be of interest. They are compiled from an analysis of 89 private patients seen in the last four years because of prolonged, *unexplained*, fever.

Typhoid group, 13; tuberculosis, 16; sepsis, 39; rare infective diseases, 8, *e.g.*, rat-bite fever, and four cases of Hodgkin's disease. The The infective total equals 73 per cent.

Of the infective group only a few special points need mentioning. A patient with old rheumatic heart disease, especially with aortic incompetence, should be suspected of bacterial endocarditis should he become pyrexial, and doubly so if he develops anæmia, a palpable spleen, or clubbed fingers. Petechiæ may not appear for many months.

Staphylococcal fever is the only common disease in this country to give prolonged remittent fever, polymorph leucocytosis and a relatively slow pulse (T. 103 deg. F., P. 80-90). The *Staphylococcus aureus* can often be obtained from a catheter specimen of urine. *Bacillus coli* infection of the urine, if causing noticeable fever, can be detected by naked eye and nasal examination of the urine.

Rigors are rare in uncomplicated tuberculosis.

Infection of accessory sinuses and tonsils is an uncommon cause of cryptic fever in adults.

Hodgkin's disease (included in this group owing to doubtful ætiology), though not common, is one of the most difficult conditions to trace when causing fever without signs. The reason is that it is precisely the lymphadenomatous lesions starting in chest or abdomen which cause the greatest pyrexial disturbance. Mediastinal Hodgkin's disease very rarely produces pressure effects in neighbouring structures and often even no cough. There is nothing diagnostic in the blood count, although a polymorphonuclear leucocytosis is the commonest finding. There is also *nothing diagnostic in the type of fever* in over half these cases. The commonest temperature in lymphadenoma is an irregular one swinging from 98 deg. to 99 or 100 deg. The second commonest is the Pel-Ebstein fever with its regular waves of pyrexia and apyrexial intervals. When present

the diagnosis is at once suggested by such a chart. The third type of fever is of continued type (100 to 102 deg.) suggesting typhoid. (Temperature charts and X-rays of mediastinal Hodgkin's disease demonstrated.) The finding of an enlarged spleen, a palpable lymph gland above a clavicle, or the occurrence of jaundice with each bout of pyrexia will naturally assist in the forming of a diagnosis. Shivering, sweating, pyrexia, leucocytosis, and rapidly-developing anæmia in young adults are all suggestive of a disease whose nature may not be revealed, in spite of all investigation, in less than several weeks. Mediastinal tuberculous glands offer the greatest difficulty in differential diagnosis.

If you forget everything else in this lecture, at least remember that pyrexia of unknown origin usually proves to be due to a common infection, and that failure to recognise it nearly always arises from lack of appreciation of the significant points in the history of the disease.

ADDENDUM

Analysis of 89 cases, in which difficulty of diagnosis of cause of pyrexia led to consultation :—

Tuberculosis—lungs	2	Abortus Fever	1
,, —glands	4	Rat Bite Fever	2
Typhoid	8	Lymphadenoma	4
Paratyphoid	1	Erythema Nodosum	1
Ærtrycke	4		
		Addisonian Anæmia	3
		Agranulocytosis	2
Appendicitis	6	Lymphatic Leukæmia	1
Salpingitis	1	Cardiac Infarction	3
Pyelitis	2		
Sinusitis	1	Anorexia Nervosa	1
Tonsillitis (chronic)	3	Nervous	1
Bronchiectasis	2	Malingering	5
Influenzal Pneumonia	1		
Infective Endocarditis	1	Malignant Growths	2
Cholecystitis	4	Alcohol	2
Streptococcal Fever	12	Ovarian Cyst	1
Staphylococcal Fever	5		
Endometritis	1	Hyperthyroidism	2

Sector News

Guy's Letter

THERE have been several additions to Guy's House Officers recently, notable of which are Mr. G. Cox and Mr. C. Chase. Mr. C. L. McClintock has now taken up his appointment as Surgeon-Lieutenant in the Navy ; we all wish him the best of good fortune, and hope that he achieves the same distinction in this new enterprise as he has done at Guy's.

Messrs. Stoneham, Neville, Davies and Glover have now left the College to take up their new abode in Nuffield House. Their genial company will be greatly missed, but deadening the echo in the marble halls is a duty well worth doing.

The real foundation of a successful hospital is its student body. It is their keenness and intelligent inquiry that sponsors deeper penetration into, and clearer understanding of, medicine and surgery. In this respect, Guy's is returning to its old order of things ; the teaching firms have been re-established and ward rounds and clinical lectures are very frequent.

B. L.

Pembury Letter

THE past fortnight has witnessed changes in the Residents' Flat. Costa Halamandres has left us and the E.M.S., and his cheery smile and " Costaisms " will be sadly missed. In addition our episcopal envoy, Bishop Budd, has left the See of Pembury for the Diocese of Orpington. To make good these losses we are pleased to welcome Horan and Kreiser, and we hope they will be happy in our midst.

After an interval of some weeks, convoys from Guy's to Pembury are to be started again. This will mainly affect the Children's Department at Guy's, where for some time it has been difficult to find accommodation for children not acutely ill, or requiring investigation.

We have heard many rumours recently concerning the future of the E.M.S. Some of these have suggested amalgamation with the Services, while another said something about plum green uniforms. If the latter should be well founded, our helpful suggestion would be to add a large umbrella to the equipment so that those who were not too busily engaged might take their turn outside the main entrances of the larger London hotels.

N. M. J.

Farnborough Letter

THE new block of wards, which was under construction at the beginning of the war, has now been completed. It has been built to replace the old maternity and children's wards, and the former have already been evacuated for the luxury of the new quarters. The children, however, still languish in their old overcrowded

wards, made more dismal by the sandbags which cover much of the windows. We hope very shortly to be able to report that they too have crossed to their new abode.

We were very pleased to learn that Heap and Rawlings, whom we were afraid might be leaving us at the end of last month, had been reappointed here, but we are sorry to say good-bye to Wills, who has been with us for only two months. In his place we are glad to welcome Burnford.

On a day that our E.N.T. Surgeon was expected here the following message was received by his H.S. from the porter's lodge: " Sister Clann is not able to come to-day. Will you please let her students know there will be no lecture."

G. L. L. R.

Orpington Letter

THIS week we most regretfully say farewell to three of our staunchest members. Van Steytler is leaving us to join the South African Army Medical Corps. Regret at his departure will be felt keenly by his many friends all over the Sector, and we wish him the very best of luck back in South Africa. Knight and Mathewson have also left, the former to join the R.A.F. and the latter to Lewisham Hospital. In their places we welcome Budd, Clarke and Hammond, to whom we extend greetings. A going-off dinner was held last week in the true Guy's fashion, with Dr. Campbell and Dr. Scott in the seats of honour. After the dinner we departed from the usual custom by inviting the ladies in and holding an informal dance in the Mess. The whole evening was a great success and was thoroughly enjoyed by everyone. We feel we should at this point congratulate Dr. Campbell on his amazingly good exercise tolerance as he whirled partner after partner round the floor.

On Saturday, July 27th, a boxing match was held in the grounds between a fully representative Guy's team and a team of local talent drawn chiefly from the Orpington Boys' Club and the Oxo Boxing Club. There was a large and varied crowd watching, headed by Professor Evans and including every soldier who was in any way transportable, and a large number of the old inmates whom we still cherish. The boxing throughout was of high standard and some excellent fights were seen. A fuller account of the match will be found elsewhere in this issue.

We have also had two concerts and a picture show during the fortnight. The first concert was given by " The Twerps," an amateur society from Bromley who gave an excellent show and wrestled manfully back stage to produce some most impressive scenery. The second concert was given by a concert party from a local regiment —we feel we dare not mention names—and, being in true " Garrison Theatre " style, was loudly applauded throughout.

Both these concerts and the boxing match were arranged by Johnson, who deserves our warmest thanks and also our heartiest congratulations on emerging from his retirement as a boxer and going three full rounds during the boxing match.

A. T. M. R.

Preston Hall Letter

UP to the present, Preston Hall has been very reluctant to take up your valuable space, but having read with admiration of the achievements of the various hospitals, I thought that the picture of activity in the Sector would not be complete without giving your readers a short account of our work during that intensely busy few weeks at the end of May and the beginning of June.

In this period, Preston Hall dealt with nearly a quarter of the total casualties which passed through Sectors IX and X.

Preston Hall has been one of the two pioneers of the Village Settlement idea in this country, and in this very excellent rehabilitation scheme patients with quiescent disease are continually under medical supervision, but live in their own houses in the village and gain their livelihood in the various industries connected with the British Legion, the whole being under the direct supervision of Dr. J. B. McDougall, the Medical Director.

Thus, there are many willing helpers available, and, at a minute's notice, Dr. McDougall was able to organise a large and efficient staff of patient-settlers who rendered invaluable service as stretcher-bearers and orderlies.

Prior to May 9th, 1940, the number of cases in hospital was 112, all of which were local Service sick and minor injuries, together with some civilian sick.

After this comparatively quiet period, we received on May 9th our first really large convoy from France, these being mainly Service sick and a few casualties.

After the experience of handling this convoy, Dr. McDougall and Mr. Slesinger, as head of the Surgical Unit, were able to add the final touches to their provisional arrangements which had been made for the reception and treatment of large numbers of wounded.

Consequently, Dr. McDougall made himself responsible for the reception, classification and allocation of the convoys to their respective wards.

Mr. Slesinger saw each patient on admission, decided on the line of treatment to be adopted in each case, and arranged the various rotas of duty in the theatre.

On May 23rd, we started to get casualties from France and Belgium, and on May 29th we started in real earnest.

Of these cases fully 75 per cent. arrived with only field dressings, and most of the men had been wounded for periods from between twenty-four hours to four days, yet there was only one case of tetanus and one of true gas-gangrene.

Owing to the uncertainty of the situation it was essential to have many beds always available for convoys which were liable to arrive at most unexpected times, usually without any warning; this involved the setting up of a transport department which was responsible for the successive evacuations. The efficiency of the transport system in evacuating patients from Preston Hall was an outstanding feature of the "Dunkirk fortnight."

During these hectic few days Mr. Slesinger, Mr. Fripp and Mr. Scott ran one operating table each, whilst Mr. Gibberd's complete mobile surgical unit came down from Guy's and gave us some very welcome help. We were also reinforced by Mr. Lindsay's mobile team from the Miller General Hospital.

An enormous amount of work was crammed into a few strenuous, but pleasant, days, and the medical staff, the Matron, the theatre and ward sisters and nurses are to be congratulated on the smooth running of the hospital during this busy time. F. R. T.

May and June in France

ON April 29th, 1940, I became R.M.O. of the Hertford British Hospital, Paris. Life was not noticeably abnormal to a foreigner, but when the Germans invaded the Low Countries restrictions were imposed on dancing, drinking, swimming and cinemas, and the police began to examine identity cards more frequently. Until May 16th there was general confidence that all was going well; the "big push" on the Meziées-Rethal front produced a feeling of panic in Paris, but there was no general exodus. We made plans for leaving the hospital, but on the following days the rush seemed to have been stemmed so we unpacked our bags. I heard, after the dismissal of Gamelin on May 20th, that he had sent a telegram to the Government to say that the Germans would be in Paris by midnight, and later had altered this to 10.30 p.m. Reynaud's speech and the changes in the Government, particularly the appointment of Mandel as Minister of the Interior, did much to restore confidence, but the admission that the stone bridges on the Meuse had not been blown up on account of treachery in the high places was not forgotten, nor will be.

Although French newspapers were very reticent on the subject, the intelligent Frenchman knew quite well the seriousness of the strategic situation that the surrender of the Belgians had only worsened. He was considerably impressed by the handling of it, although he did not fail to point out the enormous material lssses that the Belgian treachery had cost us.

On Monday, June 3rd, at lunch time, Paris had its first bombing raid. The city itself was not heavily bombed, but the suburbs, in which there were no apparent military objectives, suffered heavy loss of civilian life. There can be no doubt that this was due to the fact that the French stood in their doorways and complained bitterly that they could see nothing, for there were thin clouds at about 1,200 feet. We had heard and seen anti-aircraft gunfire before, but the dull reverberations of the bomb explosions were new and, to me, rather frightening. The patients in the air raid shelter were quite happy, but one soldier, whom I had considered too ill to be moved, began to tremble and sweat, whilst his pulse fell from 80 to 50. He was much better in the shelter, and said that he had felt sick and frightened upstairs.

Throughout the next week the situation was obviously deteriorating, and we made arrangements for the evacuation of the civil and military patients. Finally, the rumour that Rouen had been taken on June 8th made us decide to leave for Nantes on June 9th. It was said that the Germans drove into Rouen in captured British lorries with French uniforms and that they shot up the civil population.

The Secretary and I left the hospital in a 1914 car on June 9th at 3 o'clock. The roads were

choc-a-bloc with refugees in cars, lorries and carts. The average rate of progress for the first seven miles was ten miles per hour, and in some parts the wide road was completely filled from side to side with five lines of traffic leaving Paris. The peasants of the captured areas were slowly making their way south in their farm carts, many of them drawn by oxen, laden with livestock, hay and furniture. On the way out we had to make a detour to avoid a factory damaged in the raid of June 3rd. Amidst this traffic were many of the Anglo-French ambulances, and cars bearing the sign of the Corps Diplomatique, which rather altered our impression that we were leaving too soon.

On the evening of June 9th we had a frugal dinner, which we only found with some difficulty in the village of Auneau. Since there was not a bed to be found, we drove on for a few miles, and spent the night sleeping by the roadside.

The next morning the car refused to start, so my passenger decided to get a lift to Chartres to fetch a mechanic. I never saw him again, although he is safely home now.

The refugee traffic from Paris was now passing at the rate of about fifteen cars per minute. In France we had become accustomed to refugees and we thought nothing of them as they passed through Paris. Although they were by no means a holiday crowd, I never saw any of them weeping or bewailing their luck, and the children were usually asleep. A remarkable point about the French and Belgium refugees, which distinguished them from the Dutch, which one saw (1 in 2,000 or less), was their deep attachment to their mattresses which were carried on top of their cars. Perambulators and bicycles were the next most noticeable items of luggage. The cars themselves were of all vintages, but we never saw anything as matured as our 1914 Berliet; even she occasioned no merriment. Although the French drive their cars hard, an old car is given a certain amount of veneration, and is no more a suitable subject for laughter than an old lady. There were few cars abandoned because of mechanical failure, in spite of the fact that most of them carried five passengers and too much luggage, but we saw quite a number abandoned because of petrol shortage. For the last fortnight it had been increasingly difficult to find a taxi in Paris, and now we saw the reason. One car in every hundred was a taxi with its metre ticking merrily, or else with a black cap over its flag, indicating that the driver had put his family before his business. (Paris taxis had 120 gallons of petrol per month in May and June.)

Towards mid-day on June 11th I noticed that many of the passengers in cars had their faces blacked with soot. Later, I heard some interesting accounts of this, all from those who had suffered in this way. First, it was said that the Germans had dropped soot bombs on Tuesday morning and that the explosion of these had blacked everything up to the fifth storey. Later, it was said that the French air force had blackened the city themselves to make it a less obvious target for bombers, and finally it appears that the soot was from burning oil storage tanks which the French had fired.

Later in the day I had the good fortune to be picked up by some friends from Paris, who had four vehicles, including a petrol lorry and 150 gallons of petrol, which proved invaluable, as the volume of traffic which was using the roads made it extremely difficult to get petrol.

We were now about seventy miles from Paris, and the troops had already erected barricades across the roads. I have heard it said that there were many fifth columnists amongst the refugees, but if this was so, they must have had the correct papers, as my passport was examined no less than three times.

With this party I made my way to Albi, a distance of 400 miles from Paris, in four and a half days' travelling, since we rested all day Wednesday, whilst the Germans were entering the outskirts of Paris. Although the city was surrounded, the Germans did not stop anyone from leaving, since I later met people who had left Paris on June 15th. Even soldiers, I am told, were allowed to leave Paris after being disarmed. It would have been possible to travel much faster than we did for the last three days, but the petrol lorry was a 7-tonner and not very fast.

It was impossible to find beds on the road, so we slept for the most part in haylofts. South of the Loire there was no food shortage, but as the majority of the refugees were moving south-west to the coast and we were travelling south, we did not encounter very dense refugee traffic. The evacuated population, however, was very dense, and in many villages with a normal population of 2,000, there were an additional 2,000 evacuees. I heard of no cases of water-borne disease, although the sanitation and water supply were not of the highest order. The French, as a nation, have little regard for such things. In the house in which we found rooms in Albi, the owner, a doctor, had installed an expensive bath, but was quite content with an earth latrine in the garden. From those troop dispositions

that we were able to see, we thought that a line of resistance was to be made along the Loire. There were a fair number of mechanised vehicles, but the roadside trenches were without any form of firearm. The barricading of roads could not be very effective in a terrain that was flat and without gullies, since the modern vehicles could have made quite good progress on the sunbaked fields.

Off the main roads, village life was quite normal, although the people knew that the military situation was serious. The farmers were very short of labour, and the plans for the release of agricultural labourers from the Army were not living up to expectations. The people were rather apathetic towards the war after the fall of Paris, which occurred on Wednesday, June 11th, according to our news.

Saturday, June 14th, was spent in Albi, wondering when we should hear of the battle of the Loire. We learnt from other refugees that the Germans had reached Dijon on June 13th, and were continuing south to join the Italians. On the other flank they were sweeping down the coast to cut off Central France from the sea. No one whom I met contemplated surrender, even should the whole of France be overrun, if the resistance in the centre failed. On Sunday morning at 12 o'clock, we heard that Petain had taken over the Government and had asked for an armistice, in terms such as indicated without any shadow of doubt that the resistance of France was finished. This was a severe and completely unexpected blow; I decided to go straightaway by bus to Toulouse to get advice from the vice-consul there, as it was not clear whether the French surrender involved Britain.

It is curious that a trained newspaper man is able to read the emotions of a crowd. In Albi on that Sunday, the troops, townspeople and refugees stood in groups discussing the news, not forgetting the countless personal problems it raised. I saw no tears, no violent demonstrations of opinion. Strangers remained strangers, and did not discuss the news with each other. Buses were running to time, people were saying good-bye and an occasional French Army horse ambulance clattered by. The scene was entirely as it usually is on a Sunday afternoon in a French provincial town, with the addition of the refugees.

At Toulouse, the left luggage office had been full to overflowing for ten days, and the station was littered with all sorts of articles. Scrawled on the walls of the station were messages to people long overdue, put there by their relatives and friends who had waited, perhaps for days, in the station and had finally departed. The consul was just about to close his office. He told me nothing new, but advised me to go straight to Bordeaux, as there was not an hour to waste. The next train went at 2 o'clock next morning. As there was already a long queue, a taxi seemed to be the most suitable way of travelling the 150 miles. Toulouse was full of people dressed in their Sunday best and here again, although the crowds were denser than one would expect, there were no obvious signs of grief. But here I saw the most distressing sight of the whole journey. Marching through the middle of the town there was a battalion of beaten soldiers. There was but one rifle between every ten shuffling, unshaven men, stumbling over the cobbles with potato sacks slung over their shoulders. The crowd of passers-by were apparently unmoved and staring and pressing forward with curiosity, had to be pushed back by the police. My taxidriver told me that they were expecting 40,000 wounded in the next few days. Outside Toulouse, in a siding, I saw my first refugee train. Its occupants were spilled out on to the surrounding land, whilst they cooked their suppers. On the way to Bordeaux the roads were lined with Belgian soldiers, but whether they had arms or not I was unable to see.

By eight o'clock Monday morning, there were 100 people outside the British consulate and they were all issued with exit stamps and boat tickets, which incidentally were never examined afterwards, by 12 noon. We were transferred to Verdon by train and from thence to ships which lay in the bay.

We sailed home to England, 1,600 of us in a ship with a normal complement of 350, but, in spite of this, conditions were not bad.

On reaching port there was a complete shambles. In the bay there were forty ships lying at anchor. Our own ship was left waiting for eight hours, with the yellow "Q" flag flying, without any port doctor appearing. Towards evening we were taken off by tugs to the landing stage, where we stood for an hour and a half, there being many children and elderly people amongst the crowd. However, no one fainted. We were then taken, under guard, to a church hall, for medical inspection, and so that our passports and luggage might be examined. Here again we were stood in a queue, whereas it would have been quite possible, by issuing numbered tickets, for everyone to wait sitting, as there was plenty of accommodation. As soon as we had been dealt with by officialdom, we were handed over to a band of magnificent voluntary workers. They gave us

a first-class cold meal, found beds for many of us and opened the cinema that the remainder might sleep there.

Two things stand out from this Bedlam of a fleeing France: The solid woodenness of the French smallholders, who had never experienced hunger and who could imagine no Government that would make them any poorer than the one they had, and a conviction amongst the middle classes that there was a rot amidst the heaven-born in the high places.

J. N. H.

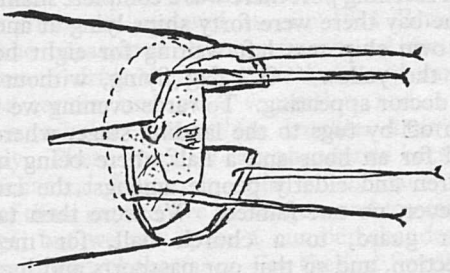
Correspondence

Guillotine Amputations

To the Editor of the GAZETTE

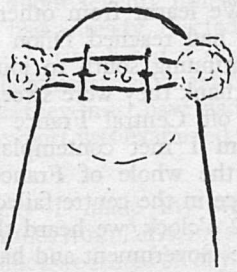
SIR,—Like Mr. Ogilvie, I trust we shall see no more of the guillotine amputation, an operation which must have caused an untold amount of suffering. Nevertheless it must be remembered that, in the presence of sepsis, to amputate either a finger or a limb, and suture the flaps, is to ask for trouble. During the last war I devised the operation described below, and have used it, at intervals since, with most satisfactory results.

The procedure is indicated by the accompanying diagrams. Skin flaps are cut as in a clean amputation, and the limb removed. The flaps are drawn forward by stout silk sutures, held by an assistant, and the cavity packed with a roll of gauze, over which the sutures are tied, without bringing the skin edges into contact. This gives adequate drainage, aids hæmostasis and prevents retraction of the flaps. At the end of forty-eight hours, the stump is dressed under gas and oxygen anæsthesia, the sutures are cut, the pack removed, and, if conditions appear favourable, the flaps are loosely approximated with two or three sutures of silkworm gut.



I.

While on the subject of dressing wounds, I would remind our younger colleagues that sepsis and suffering will sap the self-control of the bravest man. It is pitiable to see a soldier, who has undergone many painful dressings, cry like a child. With the general adoption of Trueta's principles, this type of case will become rare, but, if encountered, it is worth remembering that a few drops of chloroform on a mask act as an analgesic rather than an anæsthetic. The confidence of the patient is restored and, after a few administrations, the amount of chloroform is reduced to the vanishing point.



II.

Shows posterior aspect of stump if anterior flap is the longer.

May I crave space for one more recollection. The use, or rather misuse, of the Thomas arm splint was responsible for more damage, if less distress, than the guillotine amputation. The victim, suffering from a compound fracture of the humerus, travelled from C.C.S. to base hospital in comparative comfort. The elbow was kept in full extension by strapping applied either to the forearm or, with incredible lack of forethought, to the fingers and thumb. With the limb abducted, dressings could be done with comparative ease. Often many weeks elapsed before the patient came under the care of a surgeon who had sufficient initiative to remove the splint. If there had been much sepsis the limb was, by then, about as useful as a broomstick, and, in spite of unlimited physio-therapy, a severe degree of permanent disability resulted.

Yours, etc.,

C. C. HOLMAN.

21, Billing Road,
Northampton.

Pneumococcus and Streptococcus

To the Editor of the GAZETTE

SIR,—My friend Mr. Layton quotes me as looking upon the pneumococcus as the common organism in inflammations of the middle ear cleft, just as he looks upon the streptococcus. This is somewhat of an exaggeration of a post-prandial conversation I had with him two years ago, when, if my memory serves me correctly, I said the pneumococcus was almost as common a causative organism in otitis media as the streptococcus.

Let me substantiate that statement by statistics. From 1930 onwards the Medical Research Council conducted an investigation of "Epidemics in Schools" and published an interim report in 1938 for the first five years, 1930-1934 (Spec. Report Series No. 227). There on p. 267, Dr. F. Griffith summarises his cultivation from 199 cases of otitis media and mastoiditis as follows:—

No. of Cases	*Causal Organism*
80	Streptococcal pyogenes.
59	Pneumococcus.
60	Not determined.

Thus, of the 139 cases in which the causal organism was determined, 57.5 per cent. were streptococcal (hæmolytic) in origin and 42.4 per cent. were pneumococcal. These pneumococci were typed, and 17 were of type 1, 13 of type 3, 12 of undetermined types, and of the remainder, three was the largest number of any particular type.

My own cases are included in this series because I readily availed myself of the good offices of the M.R.C., and actually my figures for this period showed that pneumococci were slightly more common than streptococci.

Is Mr. Layton's suggestion that he is dealing with a population in whom the streptococcus has a higher incidence than in my own germane to the argument? What is relevant is whether in his population the proportion of streptococci to pneumococcal throats is greater than in mine. I have seen many instances of pneumococcal pharyngitis and find the only way of distinguishing them from streptococcal is by bacteriology. If a swab were taken of every sore throat, especially those with purulent follicles in the lymphoid tissue, the results would be instructive and I am sure contrary to present teaching. Last term I had several instances of pneumococcal folliculitis, identical in appearance to mild cases of streptococcal sore throat, due to a type 12 organism.

His other possibility commends itself to me: that the pneumococcus is a less virulent organism than the streptococcus. The invasive power is known to be less. Pneumococcal inflammation of the lung, pleura or peritoneum is a less serious condition than a streptococcal inflammation. Mr. Layton's statistics of cultures from the mastoid are strong circumstantial evidence that the same is true of the middle ear cleft, and is the strongest justification for routine bacteriological examination of aural discharges. Thus the physician is the better able to give a prognosis whether a discharging ear will clear up spontaneously as well as to decide which is the best chemotherapeutic drug.

I enjoyed reading the rest of the lecture, in which I have no doubt some exaggeration was purposely introduced. Most pleasing of all to me was "We have learned now that paracentesis never saved a mastoid." What a change from the teaching in my day as a student in 1925, when it was taught that it was almost criminally negligent not to open a bulging drum. It was years before I had the courage to go against that advice, until I found on many occasions that Nature, that kind nurse, was too quick for me.

Yours, etc.,

R. E. SMITH.

3, Horton Crescent,
Rugby.

The Woolstone Heel

To the Editor of the GAZETTE

SIR,—Having read Mr. E. R. Davies' description of his rubber cushion heel for use with plaster boots in your issue of July 27th, and having had the good fortune to meet two patients using this apparatus during a recent visit to Guy's, I should like to point out the advantages of another simple apparatus, which was in use for more than a year before the war, at first in the Orthopædic Department and later more generally throughout the Hospital, and which I believe to be more efficient.

This consists of a piece of sheet metal, bent as in the diagram, with an ordinary Phillips' rubber heel, attached by a screw, to form the weight-bearing surface. My measurements are approximate, and in fact two sizes were used to suit all patients, the width of the apparatus being about 3 inches throughout. This heel, which was first suggested by Mr. Woolstone, then Orthopædic H.S., can be firmly fixed to the sole of the plaster

by two plaster bandages. Most patients walked, immediately the plaster boot had been made, better than those I saw after several days' practice on Mr. Davies' cushions.

Consider the advantages claimed by Mr. Davies seriatim :—

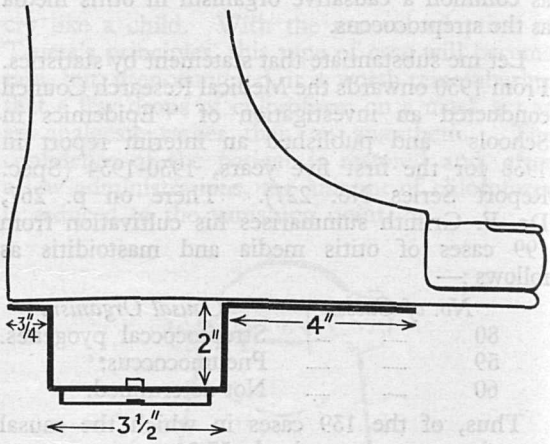
1. Economy and ease of manufacture.—The heels I have described were made in the Guy's Orthopædic Workshop at trifling cost and without difficulty; they can be used indefinitely with occasional renewal of the rubber heels simply by screwing on a new one, but even this is very infrequently necessary as the rubber heel can rotate on its screw and thus wears slowly and evenly all round its circumference.

2. Ease in adjustment.—This should never be necessary whatever type of apparatus is used, if reasonable care be taken in its original application. The weight-bearing surface must be exactly at right angles to the long axis of the tibia in both antero-posterior and coronal planes, and the heel must be of such a height and extending sufficiently far forward to ensure clearance of the toe in walking. It is failure to observe this latter rule which otherwise leads to the external rotation twist of which Mr. Davies rightly complains, for only by rotating outwards at the hip in this way can the unfortunate patient avoid swinging his weight forwards on to the toe end of the plaster, which promptly cracks and thenceforth allows the dorsum of his foot to be compressed at each step against the sharp dorsal margin of the plaster. One of the greatest advantages of the "Woolstone Heel" over the Bohler iron lies in its extension further forwards, producing greater stability and necessitating a lesser raise, whereas the "Davies Cushion," when compressed by the patient's body weight, provides neither stability nor a sufficient raise to allow clearance of the toe in walking; this latter point is clearly shown in Mr. Davies' own illustrations.

3. Lightness.—The weight of two additional plaster bandages is very small relative to that of the whole plaster, and in my experience patients do not complain of the weight of the plaster. Incidentally, the extra load may be useful in maintaining muscle power.

4. Avoidance of soiling bedclothes by removal at night.—This would certainly be an advantage, albeit a slight one, if the toe of Mr. Davies' plasters could be kept clear of the ground in walking. Reasonable care in choosing one's path, even in the horse-infested Borough, with judicious use of a doormat, will, however, avoid any great inconvenience or soiling.

5. Ease in removal of the plaster.—There is no difficulty with the "Woolstone Heel," as the side irons of the Bohler iron have been eliminated and the easy method of removing any plaster boot is by splitting down the lateral side.



6. Absence of skid, and cushioning.—The rubber of the "Woolstone Heel" serves the same purposes, and I believe that the cushioning by 1 inch of Sorbo rubber in Mr. Davies' apparatus impairs the solidity of the weight-bearing surface, which is so important in establishing a firm, confident tread and a normal gait.

I hope that Mr. Davies will try the simple experiment of fitting a series of patients first with one and then with the other of the types of apparatus we have compared, and I feel confident that the advantages of the "Woolstone Heel" will more than justify any increased soiling of the bedclothes.

Yours, etc.,

J. H. MAYER,
Captain, R.A.M.C.
27th General Hospital, R.A.M.C.,
c/o Army Post Office.

Nursing Education

A RECENT and important development in the education of nurses is the linking up of the schools with the hospitals. This has been made practicable by the division of the Preliminary State Examination into two parts. Hitherto no pre-nursing course has exempted a probationer from any examination after she has entered hospital. Now the Board of Education and the General Nursing Council have agreed that one year's course in preparation for a nursing

career may be taken at certain approved secondary schools and technical institutes. This course includes Anatomy, Physiology, Hygiene, Elementary Biology and Zoology and certain cultural subjects. At the age of 17½ years the student may then take Part I of the Preliminary Examination (Anatomy, Physiology and Hygiene). When she enters hospital, she will be credited with this and will only have to take the subjects of Nursing and First Aid to complete the Examination. This she may do after one year's practical work in hospital.

Pre-nursing courses are beginning this autumn in some schools, and Sister Hilda Gratian has given talks to the Senior Girls in some schools on Nursing as a Career, and she is in touch with some of the teachers of the courses in the Kent schools. These are medical practitioners for Anatomy and Physiology and science mistresses for the other scientific subjects. It is suggested that Sister Tutors may be invited to teach in schools where the teaching personnel is not suitable. In all cases the course and the lectures must be approved by the Board of Education and the General Nursing Council.

The Guy's Nursing School is glad to sponsor this new development, for the authorities have for years past realised that many suitable candidates for nursing have been lost through the failure of the hospitals to interest the schools in a useful and satisfying profession.

* * * * * * *

Congratulations to Sister Miriam Fish who has been awarded the Cosmo Bonsor Scholarship of £50 this year. Miss Fish is taking the course for Nurse Teachers which begins at the Royal College of Nursing in September. This course prepares students for the Diploma of Nursing Examination of the London University, a necessary qualification for a teaching or an administrative career. Miss Noel Surridge is also taking this same course with the Cowdray Scholarship.

We wish them both a happy and successful year.

They will be a loss (only temporary we hope) to the nursing staff at Orpington.

M. E. F.

Sport

Boxing

ON Saturday, July 27th, a boxing match was held between Guy's and a local team from the Orpington Boys' Club and the Oxo Boxing Club. The results were as follow :—

Welterweight.—Wammond (Guy's) *v.* Emery (Oxo)

This was a very evenly contested fight in which Wammond put up a very good show against a more experienced man and was narrowly beaten on points.

Lightweight.—A. Halamandres (Guy's) *v.* Johnnie Webb (Oxo).

This was the best fight of the evening. Webb was a powerful and agressive fighter who probably had the harder punch if he had been allowed to land it. But Halamandres boxed his man superbly and continually held him off with a straight left which was a joy to watch. He came out a comfortable winner on points.

Lightweight.—C. Halamandres (Guy's) *v.* Anderson (O.B.C.).

Costa is always at his best against a taller man than himself and found Anderson, who was no taller than he, a difficult man to deal with. However, he boxed extremely well and won on points by a narrow margin.

Featherweight.—White (Guy's) *v.* Jones (Oxo).

White was very unfortunate to be caught by a well-timed right to the jaw in the first round and the referee stopped the fight in spite of White's protestations.

Middleweight.—Woolridge (Guy's) *v.* Avery (Oxo).

Woolridge boxed well in the first two rounds against an older and stronger man, but tired considerably in the third round and was beaten on points.

Welterweight.—Johnson (Guy's) *v.* Sparks (O.B.C.)

Johnson, who was a leading light of the Guy's team as much as eight years ago, came out of retirement and fought with admirable vigour to the cheers of the soldiers and shouts of "Sock 'im, Doc.!" He displayed a long and useful left and scored well with his right to earn the referee's decision of a draw.

Flyweight.—Lewis (Guy's) *v.* Webb (O.B.C.).

The first two rounds were evenly fought and both men mixed it well. In the third round Lewis began to tire and was finally put out by a barrage of powerful blows.

Hospital Information, etc.

Pass List

ROYAL COLLEGE OF PHYSICIANS OF LONDON

July, 1940

M.R.C.P.

R. D. Blachford — R. V. Coxon — J. L. Woodhouse

UNIVERSITY OF LONDON

M.D. EXAMINATION

July, 1940

Branch I.—Medicine

P. H. Denton

Branch V.—Hygiene

E. C. H. Huddy

SECOND EXAMINATION FOR MEDICAL DEGREES

July, 1940

A. W. Banks
V. Y. Bockner
P. S. Clarke
G. H. Gilford
H. J. Lewis
P. E. Mars
A. J. P. Oldham
H. B. F. Ordish
R. L. Ray
J. W. Robb
E. H. O. Smith
R. S. Smith
D. A. Tait
I. T. The
H. Whitworth
O. H. E. Williams

The following students have now completed the Second Examination under the old regulations by passing in Pharmacology :—

P. N. Cardew — J. G. Stubbs

FIRST EXAMINATION FOR MEDICAL DEGREES

July, 1940

P. Buri
K. A. A. Campbell
A. C. R. Cini
C. B. Clarke
E. C. Davies
G. W. Edward
M. M. El Shinnawi
J. Fifield
A. D. Humphreys
F. L. Jackson
E. D. C. Jones
R. G. G. Jones
T. J. Jones
P. C. Leeson
S. B. Levene
J. W. Lewis
W. E. McBean
G. A. Morrant
D. P. Nicholson
R. D. Rogers
D. J. Rudman
F. Simm
D. Q. Trounce
J. Walsh
C. H. Wilkinson

CONJOINT BOARD

June, 1940

FIRST EXAMINATION

Anatomy and Physiology

J. F. Baker
P. F. E. Brown
M. A. Filose
G. M. Turner
B. H. Wilshere

Anatomy

J. O. Legg
D. Redpath
R. Webb

Physiology

M. G. Marks
J. K. Ogden
P. F. Pearson
A. Southwell

Pharmacology

H. W. Bunn
E. J. Grierson
J. T. M. C. Jenkins
G. R. W. N. Luntz

FINAL EXAMINATION

July, 1940

The name of D. S. Hayton-Williams should have appeared in the Pass List published in the last number of the *Gazette*. He has now completed the Examination.

ROYAL COLLEGE OF SURGEONS

L.D.S.

FINAL EXAMINATION

July, 1940

Part I.—Surgery

F. E. Barlow
A. E. Baxter
A. H. Bell
O. R. Berry
J. K. Blackwell
J. Cranfield
A. P. Davies
P. A. Dodington
J. R. Dyer
W. O. R. Evans
D. L. Gabb
F. E. B. Heesom
W. H. Hudson
R. N. Lewis
D. Mackenzie
J. C. Timmis
J. B. Woodward

Part II.—Dental Surgery

W. T. Athey
K. S. Bacon
E. R. Burt
J. H. Flitcroft
E. A. G. Hilton
R. L. Hurst
P. E. Jeffery
R. E. Matthews
N. M. Midgley
J. H. Ratcliffe
I. W. Ross
R. B. D. Stocker
R. A. Zorab

Distinguished Service

The Supplement to the *London Gazette* of July 26th contained the names of the following Guy's men who have been brought to notice in recognition of distinguished services rendered in connection with operations in the field up to June, 1940 :—

Lieut.-Col. G. T. Hankey, R.A.M.C.

Temporary Major R. S. de C. Bennett, R.A.M.C.

Papers by Guy's Men

Thompson, A. Ralph. Injuries of Urethra. *Brit. J. Urol.*, 1940, **12**, 29.

Changes of Address

C. M. Beales, Flying Officer R.A.F. (V.R.), c/o Lloyds Bank (Cox & King's Branch), 6, Pall Mall, S.W.1.

A. D. Buck, L.D.S., Angle House, St. Austell, Cornwall.

R. W. B. Ellis, Flight-Lieut. R.A.F. (V.R.), Church Leys, Rearsby, near Leicester.

W. N. Mann, Lieut. R.A.M.C., H.M. Hospital Ship *Dorsetshire*, c/o G.P.O. London.

J. Naylor Hunt, Surgeon-Lieut. R.N.V.R., Royal Naval Barracks, Chatham.

J. H. Mayer, Captain R.A.M.C., 27th General Hospital, c/o Army Post Office.

H. J. Redman, Surgeon-Lieut. R.N.V.R. (D.), H.M.S. *Excellent*, c/o G.P.O. London.

J. H. Sarginson, Lieut. A.D. Corps, Officer-in-charge The Army Dental Centre, Shetland Islands.

Marriages

YATES—THOMAS.—On June 22nd, 1940, at Ealing, John A. Yates to Jean Cockcroft Thomas.

EDS. { N.A.N. B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

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PASSIM

THERE seems to be an unusual amount of unnecessary heroism being displayed in and around London during these days of air raids. Instead of taking refuge in the shelters provided for them, the individuals concerned run to the windows and even climb to the top of buildings to see the havoc, if any, that is being caused.

In point of fact these people are not taking as much risk as they would like others to believe; worked out on a percentage basis the possibility of each person in a community becoming a casualty is almost a negligible one. On the other hand, if everyone were to copy this practice of exposing themselves, then for each bomb dropped the resultant damage would be relatively enormous, and consequently our defence organisation would appear to be ineffective.

It is the enemy's aim to lower the morale of this country by creating as much panic and confusion as possible and thereby bring us to submission. He does not really care about the destruction of a few houses, buildings, and even aerodromes, but if he can cause terror among us and our fighting forces then his success is assured. So let us not aid the enemy by flagrantly exposing ourselves to death and devastation, and instead co-operate with our officials and leaders by seeking safety the moment an air raid siren is sounded.

THE value and tradition of any institution is dependent upon its personnel. Throughout its long history Guy's has been exceptionally careful in its choice of students, housemen and staff, and in this way our prestige has been maintained at home and, even more so, abroad. The performance of Guy's men in the war so far has provided no exception to this observation; while it is the lot of the majority of us to carry out our duties unobtrusively, provided we make no mistakes, a few of our colleagues have been more fortunate in that they have been placed in difficult and dangerous positions calling for courage, ability and even heroism. With true Guy's spirit, in spite of being severely wounded, these individuals carried on until their job was done; His Majesty's Government has rewarded them accordingly. If the information is available, the *Gazette* feels that it is its duty to publish details concerning these men so that they may join Guy's gallery of honour and serve as an inspiration for those of us that follow.

IN the last fortnight Mr. Anthony Eden has made one of the most encouraging speeches yet to be delivered. There has been much discussion in the past about our ultimate peace aims, but what we are more concerned with at the moment is how we are going to prosecute this war to a decisive and successful end; this was the main theme of Mr. Eden's broadcast to the Empire and the world.

Having learnt a rather bitter lesson from Hitler's recent victims, Britain is converting herself into what is now popularly known as an "armed fortress"; every precaution is being taken against invasion from without, and, what is more important, against collapse from within. However, our mere curling up into an impregnable shell will not bring us victory. We must wear the enemy down by an offensive which combines air attacks on all vulnerable points, a stringent blockade of all enemy shipping, and the marshalling of all those forces in enemy territory which may be described as having British tendencies.

Our Secretary of War has assured us that all that is humanly possible is being done to safeguard the interests of the British Empire and to remove that pernicious influence of Nazism from world affairs.

THERE is in circulation a great deal of rumour and speculation about the future of the Emergency Medical Service. Now that the war has been brought virtually to our own "doorstep," it would appear that a service which was designed to deal with every medical emergency in every district is indicated now more than ever; for this reason the idea that the present system is to be abolished in the next few months is without any basis. On the other hand, there is in existence the Royal Army Medical Corps, whose duties, for the present, somewhat coincide with our own of the Emergency Medical Service. Thus, one can conceive of a very embarrassing, and even inconvenient, situation in which two bodies of people, each directed by a different authority, each subjected to an entirely different kind of discipline, and one receiving emoluments out of all proportion to that of the other, each doing the same work simultaneously.

The answer to all this is that the above rumours are probably correct in so far as any steps that are being taken are likely to be in the direction of consolidating all the medical services of the country into a uniform organisation; this will eliminate any childish friction which otherwise would surely occur.

Tuberculosis—The Fall in the Death Rate

By H. C. Cameron, M.D.

DURING the last fifty years the decline in the incidence of tuberculosis has been continuing at an accelerating rate. The fall exceeds greatly the general reduction in the mortality rate from all diseases. Roughly speaking, the death rate from all diseases has been reduced by rather less than one-half, while the death rate from tuberculosis has been reduced by two-thirds. In 1927 the death rate from all forms of tuberculosis, as shown by the Registrar-General's returns, was 972 per million persons living; in 1937 it was 695 per million persons living.

In infancy tuberculosis is a comparatively rare cause of death. The diagnosis, except in cases of tuberculous meningitis, is not easily made, and very many deaths in reality due to tuberculosis appear in the returns under such headings as bronchopneumonia or marasmus. As tuberculosis in the first year of life is now more frequently detected than formerly, because of the evidence obtained from X-ray examination and the cutaneous test, and because of the elaboration of successful methods for procuring sputum from infants for examination for tubercle bacilli, the fall in the death rate is probably much greater than appears in the returns. The actual number of deaths registered in England and Wales in the first year of life, returned as due to tuberculosis of all sorts, was 718 in 1927; 389 in 1937. In the first ten years of life the comparable figures were 3,919 in 1927 and 2,496 in 1937. Since tuberculous meningitis is perhaps the form of fatal tubercular infection least likely to be undetected or to be confused with other conditions, a study of the figures for tuberculosis of the central nervous system is especially significant. In 1927, for children under five, the notifications were 1,579 as compared with 829 in 1937.

Improvement in the mortality rate among children has been determined by two factors. Firstly and chiefly, it is due to the diminished risk of contact with adults suffering from active tuberculosis; this has followed both from the decline in the numbers of phthisical persons and from the increased activities of the Public Health Services in the early detection of cases of phthisis and the prevention of further contacts. In the second place, so far as infection by tubercle bacilli of bovine type is concerned, the control of tuberculosis in cattle and the insistence in most localities upon the Pasteurisation of milk have resulted in a great diminution of this type of infection. It is probable that the fall in the number of cases of abdominal tuberculosis is even greater than that of the pulmonary disease. In some of the United States of America where, by a policy of slaughtering all animals who react positively to the tuberculin test, tuberculosis among cattle has been almost completely eradicated, and primary abdominal tuberculosis is now hardly met with. In this country tuberculous peritonitis and tuberculosis of the mesenteric glands, which, fifty years ago was frequently encountered, have become noticeably rare in clinical practice.

THE DECLINE IN THE FREQUENCY OF THE INFECTION

More important, perhaps, than statistics of the mortality in childhood from tuberculosis are those studies of the number of children who have become infected; these have been rendered possible by the discovery of the sensitization tests of Von Pirquet, Moro, Calmette and Mantoux.

When Von Pirquet first published studies of his test, he found that some 80 per cent. of all children in Vienna reacted positively. At the time he stated that he did not expect so high a figure would be found in other cities, because tuberculosis in Vienna was, and had always been, notoriously rife. Since then, large numbers of children have been submitted to the test in all parts of the world, and although the percentage which reacts positively has often been high, it has seldom attained to the first figure of Von Pirquet. Figures of about 40 per cent. in children over ten years of age are common. Recently, especially in the United States, where the test has been carried out on a very large scale, a significant decline in the percentage has been noted. In cities and communities which fifteen or twenty years ago gave a percentage of 45 per cent. of positive reactions, the figure has fallen to 10 per cent. or 15 per cent. With the decline in the incidence of adult phthisis, and the gradual elimination of dangerous contacts from the child population, it is to be expected that this fall will be continued.

THE PRIMARY INFECTION WITH TUBERCULOSIS

That the clinical course of tuberculosis in childhood differs widely from that in adult life has long been known and appreciated. It was recognised, for instance, that the form of infection of the lungs known as phthisis hardly ever occurred before puberty; while glandular infection and caseation, acute miliary spread and meningeal involvement, were characteristic of the disease in childhood. It is only recently that we have been able to understand something of the reasons for these selective differences and to construct, as it were, the life history of the tubercle bacillus in the body of man.

The primary infection, whether in child or adult, takes place comparatively insidiously, with minimal reaction in the tissues and with few, if any, symptoms. There is a delay as a rule of some three to seven weeks before the development of what is called sensitivity. During that time, all the tendency is to repair. The risk of local extension, both from the primary focus and from any small metastases which may have resulted from an initial bacillæmia, is not great. It is as though a fire had broken out in a damp undergrowth which a few weeks later will be dry and highly inflammable. The tubercle bacilli which are inhaled into the lung are localised by the usual phagocytic response of the polymorphonuclear leucocytes. In turn these are ingested by the large mononuclear cells which, by their aggregation, determine tubercle formation. In one direction, however, extension is invariable for the lymphatic paths, as yet unobstructed by violent local inflammatory reaction, soon carry the infection to the corresponding tracheo-bronchial glands, which become enlarged in varying degree. After this latent period sensitization of the tissues occurs. How far the primary focus may be regarded as conferring a specific anti-tuberculosis immunity must be discussed later. It is clear, however, that it is sensitivity rather than immunity which is the first conspicuous and unmistakable sequel of the primary infection. Sensitivity implies that further infection, other than that of the primary focus, will be accompanied by tissue reactions on a scale much greater than those provoked by the original invasion. In other words, in sensitized tissues the reaction is allergic. The cutaneous tests of Von Pirquet and others are dependent on and proof of this sensitization of the tissues by a former infection. The violent response of the sensitized tissue, contrasts with the absence of reaction in the unsensitized tissue. Simple non-inflammatory reaction and leisurely proliferation of cells has given way to a rapid inflammatory response, a heightened phagocytosis, rapid tubercle formation and exudative reactions.

It is still uncertain whether further and secondary infection is usually endogenous, by spread or metastasis from the primary focus, or exogenous by renewed inhalation of bacilli from extraneous sources.

THE FIRST DANGER PERIOD

Reinfection however derived is accompanied by severe and sometimes fatal reactions. The danger is greatest at two periods of the child's life, the first immediate, the second remote. The immediate follows close upon the primary infection and is inversely proportionate to the age of the child. In very young children the danger at this time of fatal tuberculosis is very evident. Wallgren has the following figures. Of 453 children who had been under observation since the time of the primary infection, 35 (7.7 per cent.) died. Most of the deaths occurred in young children.

	0.1	3	7	16	*Total*
Age groups					
Number of children	39	64	225	125	453
Mortality rate (%)	35.9	15.6	4.4	0.8	7.7

The interval between the primary infection and the appearance of clinical evidence of tuberculous meningitis as given by Wallgren in 64 cases is as follows :—

	Weeks				*Months*						
Interval	1	2	3	4	2	3	4	5	6	7	13
Cases	0	3	0	12	25	12	4	2	3	2	1

It is clear that tuberculous bacillæmia with miliary tuberculosis and meningeal involvement is a grave danger in young children from the fourth to the sixteenth week after primary infection. Yet it is also clear that most older children at least pass through the primary infection unscathed and reveal that they have been infected only by their sensitivity as shown by the skin test.

Other forms of reinfection disease occur throughout childhood, but with a time relationship perhaps less definite than that of tuberculous meningitis. Tuberculous pneumonia is determined by the spread to a bronchus and so to the sensitized lung. This may be produced by lymphatic spread, by direct involvement of the bronchus in the tuberculous infection, or by a fistulous communication from a broken-down lymphatic gland. With a virulent and active infection caseous bronchopneumonia is produced. With a milder infection, by the spread of disintegrated caseous material from a gland through a fistulous communication with a bronchus, an exudative tuberculous pneumonia capable of showing the signs of healing and resolution, is started and one form of the so-called epituberculosis, may be the result. Pleurisy with effusion may also occur as a reinfection form of tuberculosis, and is usually secondary to a primary focus near by in the lung parenchyma.

By no means all tuberculous lesions of the first infection type occur in the lung. Eye, ear, nose and throat are at times the seat of a primary lesion, while tuberculosis of the cervical lymph glands may be either primary or secondary to lesions in these situations, which are usually so small as to make detection extremely difficult. It is probable that infection by tubercle bacilli of the bovine type is responsible for most cases in which the primary localisation is in the intestinal tract, a belief which accords with the great decline in the incidence of this form of tuberculosis following on successful measures for the eradication of tuberculosis in cattle and the Pasteurisation of milk.

Not infrequently metastasis of minute foci to bones or to the central nervous system occurs during the course of the first infection. Such foci may be dormant or be destroyed, or after a varying interval they may give rise to active reinfection forms of disease.

THE SECOND DANGER PERIOD

There remains the second danger period of puberty, adolescence and early maturity. Sensitivity once acquired is persistent. It is true that occasionally localisation and repair may be so complete that the primary focus is isolated and replaced by scar tissue. The sensitivity may then decline and even disappear. Such a result is, however, the exception rather than the rule. If the child has once been infected, reinfection never again has the quiescent course and the relatively good prognosis—good, that is to say, except in very young children—of the first infection. It is in the sensitized tissues of the lung that the response to reinfection takes the form which we know as phthisis—that is, of ulcerative, caseous and fibrotic processes in different degree, a form which is never found in primary infection.

It seems probable that the fatal miliary tuberculosis and tuberculous meningitis occurring within the first few months after primary infection in early childhood are to be attributed to endogenous reinfection. If tuberculin-positive and tuberculin-negative groups of children are similarly exposed to tuberculous infection, it is the general experience that while those who react positively show no ill-effect, those who react negatively become infected and later react positively. In other words, the negative reactors must pass through the first danger period during which a small number will succumb. Reinfection from an extraneous source soon after the primary infection is less likely because the specific immunity against a new exogenous infection may be presumed to be at its height. This holds good for all infections which produce a specific immunity. It does not imply that the existing infection is under control or unable to spread. The syphilitic can in the same way contract no new syphilitic infection, although the disease may be progressive.

In the second danger period the matter is more doubtful. Many years may have passed since the primary inoculation. Animal experiments show that anti-tuberculous specific immunity is only relative. Inoculation with large numbers of tubercle bacilli can always break down immunity. Opinion at present inclines to the view that the development of adult phthisis is due to reinfection from exogenous sources of a lung sensitized by a previous primary infection. The point at issue would seem to be of great practical importance. If reinfection from without is the rule, then it is specially important that children who react positively should be spared contact with infected individuals. If reinfection is never exogenous it is possible to regard those children who have overcome a primary infection as a select group in whom the danger of contact is considerably lessened. Meanwhile, it is perhaps best that we should accept both arguments as in a measure true, and regard both endogenous and exogenous reinfection as possible. Infection from without

in those who react positively may be both more difficult to establish and more dangerous when established.

Those who believe that the specific immunity conferred by the first infection is considerable and lasting, regard the reactivation of the dormant focus and the endogenous reinfection as brought about by a fall in what is termed the natural or non-specific resistance. This natural resistance is inherited and inborn. It is highly developed in certain stocks and not in others. The virulence of tuberculosis among primitive peoples is explained on the assumption that only strains with high resistance tend to survive among civilised man, while among primitive peoples, where tuberculosis has not yet been encountered, strains of low resistance are still abundant. This unspecific natural resistance is lowered and may be overcome by overcrowding, overwork, deficient diet and other environmental factors, and is influenced by endogenous factors such as puberty, pregnancy and parturition. Phthisis very rarely occurs before puberty, but with its onset there is a sharp rise in incidence. Of 403 cases of pulmonary tuberculosis of adult type, Wallgren found that 22 developed between the ages of 10 and 15; 118 between 15 and 20; and 108 between 20 and 25—62 per cent. of the whole.

THE COURSE OF PRIMARY INFECTION

The possible results of the primary infection may be tabulated as follows:—

1. It may heal completely while the child retains in some degree the resulting sensitivity. This is the course in most cases.
2. It may remain in being but quiescent, with an increased specific resistance to new infections but with a certain liability to reactivation and endogenous reinfection.
3. It may extend early and produce death by miliary spread, by tuberculous meningitis, or by bronchogenic spread, but only after sensitization and a certain degree of specific resistance have been established.
4. It may extend later and produce gross disease of adult type in spite of the establishment of specific resistance.

THE PURPOSE AND DANGER OF ALLERGY

Despite the intensity of the response of the sensitized tissues to which the name allergy has been given, this reaction is not to be regarded as entirely or even mainly inimical to the interests of the patient. Although danger may lie in a too violent response, nevertheless the purpose and the results of the reaction, if of moderate degree, are favourable and beneficial. Exudation of lymph and an increased phagocytic response, like a high body temperature, have their part to play in the struggle against the activities of the invading organisms. By such means the forces of the defence are replenished while barriers are formed to prevent further spread. Thus lymphatic spread with the involvement of distant glands is little evident after allergy has been established because the lymphatic paths have become impermeable, plugged by leucocytes and inflammatory exudate. For the same reason bacillæmia with miliary spread, comparatively common in young children soon after the primary infection, is to a great extent prevented in the later stages by the violence of the inflammatory response around the focus. By allergy the ability to oppose the ready passage of bacilli has been established and the power to destroy bacilli greatly increased. Both sensitivity and allergy may be regarded as having a part to play before immunity is well established. In tuberculosis they are more prominent and dangerous than in other infections because tuberculosis is a chronic disease. We have not to deal with a single infection and one lasting immunity. The body has to devise means to cope with renewed invasion or with reactivation and spread. The process of acquiring immunity is long and dangerous, and the result often incomplete. The degree of sensitivity and allergy fluctuates throughout the struggle according to the concentration of tuberculo-protein entering the circulation. If the amount is excessive, the allergic reaction may itself constitute a danger; if the amount is moderate, the reaction is slight, perifocal and helpful in the control of the focus. In general we may say that at one end of the scale we have hypersensitivity and allergy, at the other immunity, tolerance and reduced sensitivity. As an example of extreme tolerance we may take a case of fibroid phthisis when innumerable tubercle bacilli may be constantly in contact with mouth, throat, bronchi and bowel without effecting a lodgment or producing any ill-effect.

THE DIAGNOSIS OF PRIMARY INFECTION

The initial problem then is the detection of the primary infection, usually in the lung. How can this be achieved? Symptoms are minimal or absent. Cough, expectoration and loss of weight are not to be found. About the time when sensitivity appears there may be some slight elevation of temperature. Exceptionally there may be a prolonged period of slight pyrexia. From the nature of the lesion it is inconceivable that

physical signs should be present. What then remains?

1. The sedimentation rate is raised, but such a finding is in no way pathognomonic of tuberculous infection.

2. The differential count of leucocytes is often suggestive because of the predominance of large mononuclear cells. The normal proportion of large mononuclear cells to lymphocytes is as 1 to 3. If this ratio is considerably increased it is suggestive of an early tuberculous infection. In the suppurative and ulcerative processes of later disease polymorphonuclear cells and in fibrotic and reparative processes lymphocytes predominate.

3. In a few cases at the time when sensitivity develops, there is a significant outbreak of erythema nodosum. Typically the cutaneous test becomes positive at the moment of the appearance of this eruption. Especially in early childhood erythema nodosum may well suggest the likelihood that primary tuberculous infection has occurred some six weeks before the eruption of the rash. Erythema nodosum is not, however, a specific response to infection with tubercle. It occurs with other infections. It is often due to hæmolytic streptococcal infection and it occurs, though much more rarely than was formerly thought, in rheumatic infection.

4. An X-ray examination of the lungs may give clear evidence of the primary infection. The so-called Ghon focus may show as an opaque spot in any part of the lung, and the secondary enlargement of the tracheobronchial glands may be sufficient to make their shadows discernible. In some cases transitory shadows are also visible from time to time, due to exudative processes in the parenchyma of the sensitized lungs. Because of their transitory nature, it follows that the more often the lungs are examined, the larger will be the number of cases in which these shadows are detected.

It is not possible to state with accuracy the proportion of cases which furnish definite evidence from an X-ray examination. The Ghon focus is often minute and its definition slight. Even after death, inspection at an autopsy may fail to identify it. The enlargement of the glands must be considerable before their shadows are unmistakable. Perhaps not more than half of all cases are capable of detection by routine X-ray examination.

5. In the fresh primary lesion, in a high proportion of cases tubercle bacilli can be demonstrated in the sputum. Since young children do not expectorate sputum, but swallow it, it is in the washings from the stomach, drawn off in the early morning before food is taken, that the search must be instituted. Repeated and patient examination will raise the percentage of positive findings to a considerable total.

Except then for the occasional warning sign of an outbreak of erythema nodosum, except for a somewhat significant shift of the differential leucocyte count and except for the intermittent help of repeated X-ray examinations, we depend and must depend upon the finding of tubercle bacilli in the sputum, and upon the presence of a positive skin test. The younger the child the more significant a positive skin reaction becomes.

THE HIGH MORTALITY OF THE REINFECTION TYPE IN EARLY CHILDHOOD

A diagnosis of primary infection with tuberculosis means that the child must be kept under strict observation, especially during the six months following the infection. The danger is especially great in young children. Wallgren's figures already quoted show a mortality in primary tuberculosis from early spread of 35.9 per cent. in children under one year, and of 15.6 per cent. in the second and third years of life. In childhood tuberculosis of reinfection type is usually fatal. Hamburger found a mortality in children with active tuberculosis of reinfection type of 100 per cent. in the first six months of life; of 80 per cent. in the second six months; of 70 per cent. from the second to the tenth year; and of 50 per cent. from the eleventh to the fourteenth year. Ghon emphasized in his post-mortem studies how little evidence was to be found of healing processes in young children:—

	Healed	*Partially Healed*	*No tendency to Heal*
0-1	0	6	94
2-3	14	16	70
4-7	35	35	30
8-14	70	10	20

All these figures emphasize the urgent need to separate the young children from a tuberculous family environment.

THE NEED FOR SUPERVISION AND MEASURES OF PREVENTION

Since, however, the proportion of young children infected in the first years of life is small, it remains true for the majority of children to say that they pass through the primary infection apparently unscathed. The time will come when the children who react positively will form only a small minority group. Such children are not to be regarded as invalids or as in any need of special treatment.

The experience at Lymanhurst in the United States is interesting in this connection. For many years all children who reacted positively were given the opportunity of admission to a special sanatorium where they lived under close supervision. About one-half of the parents accepted, while the other half refused. No significant difference in the number developing active tuberculosis in later life was found and the sanatorium was ultimately closed. It is probable that the future will see more continuous observation of the diminishing number of children who react positively. X-ray examinations repeated at intervals are sometimes capable of detecting the development of phthisis at a stage long before that which gives rise to symptoms or to physical signs, and at a stage so early that treatment is almost certain of success.

The last twenty years have seen continuous attempts, especially by Calmette and his colleagues, to produce immunisation against tuberculosis. From 1924 onwards, in many communications, these workers confidently claim to have succeeded in attenuating the virulence of the tubercle bacilli of bovine origin by cultivating them in consecutive series in the presence of ox bile, with the object of modifying in the course of generations, the physico-chemical constitution of the bacilli. To this end bacilli are allowed to multiply in a highly-alkaline medium which is rich in lipoids. After 230 successive cultures made in thirteen years the culture became innocuous to all kinds of animals. Thereafter it no longer causes tuberculosis when inoculated intravenously, intraperitoneally or when given by mouth. The bacilli remain avirulent but retain their toxic properties in so far that like virulent bacilli they produce tuberculin and evoke the formation of antibodies, as is shown by the complement fixation test. The power of the bacilli to produce tuberculosis has been lost, and even in massive doses in a susceptible animal tubercular infection does not result. This attenuated bacillus from the initials of its discoverers is called the Bacillus Calmette Guerin or B.C.G. The immunity produced is considered by Calmette to be a true immunity. Since tubercle bacilli, if injected into persons already infected with tuberculosis, thereby produce an increased sensitization and allergic symptoms, it is necessary that this form of vaccination should be applied in the first days of life before the possibility of infection has arisen.

Calmette's work and claims have been subjected to much criticism. It is objected that in the absence of positive tuberculin tests there is no proof that the vaccine, which is administered to the newly born by mouth, has in fact been absorbed and that the quantitative estimation of dosage is impossible. Calmette bases his claims to success entirely upon a statistical survey of the subsequent history of the many thousands of infants exposed to infection who have been subjected to this vaccination in France, and upon a comparison between the death rate among them from tuberculosis with the death rate among children not vaccinated but similarly exposed to infection by contact with tubercular parents. He makes the statement that 18 per cent. of children of tubercular mothers, if not protected, die from tuberculosis in the first year of life, and this is contrasted with the figure of 2.4 per cent. for vaccinated children living under the same conditions. Calmette's statistical facts and deductions alike have been subjected to very destructive criticism by Greenwood. Careful investigations into the death rates of infants living in a tuberculous environment have failed to show a mortality in any way approaching that alleged by Calmette. The Lancashire investigation showed a mortality not of 18 per cent. but of 3.2 per cent. Inasmuch as Calmette has relied upon statistical evidence as the only proof of the efficiency of the method, the exposure of many fallacies in his deductions has led in recent years to a decline of interest in his claims. Moreover, it is agreed that the procedure is not certainly without risk. B.C.G. is a living vaccine and it is necessary to be certain that its administration does not give rise in any circumstances to tuberculosis. A proportion of children so vaccinated do afterwards develop tuberculosis, and we are without means of determining whether such a development indicates a failure to protect or is the direct result of the inoculation. The recent disastrous happenings at Lubeck, where many infants following on vaccination with B.C.G. developed fatal tuberculosis, were probably to be explained by faults of technique which permitted infection with virulent tubercle bacilli, but they served nevertheless to shake confidence in the procedure.

Since 1927 Wallgren in Gothenburg, seeking to avoid the inconsistencies and obscurities which are involved in the oral method of Calmette, has conducted an extensive experiment in which he secures by hypodermic inoculation an accurate estimation of the dosage as well as the certainty that the B.C.G. vaccine has entered the organism and has made its presence manifest by means of the development of a positive tuberculin reaction. In order to be sure that the course of the vaccination was not disturbed by an accidental virulent tubercular infection, the individual child is isolated until allergy is manifested by a positive skin test, which occurs as a rule six weeks after the inoculation. Moreover, since some guarantee

must be obtained that infection has not already taken place, a preliminary isolation period of six weeks, except in the case of the newly born, is necessary before the inoculation, and at the end of this preliminary isolation the subject must show a negative tuberculin skin test. In other words, isolation is necessary for three months, and at the time of inoculation, in the middle of this period, the child must be tuberculin negative, a reaction which should change at the end of the period to tuberculin positive. Up to the end of 1937, 1,069 children had been vaccinated. Most of these, especially those vaccinated in the earlier years, were living in contact with active tuberculosis. In 1939 this material was investigated and analysed. In every case an X-ray examination and a tuberculin skin test was carried out. Of the 1,069 children 905 were available and were examined, 84.7 per cent. of the whole. Of a further 53 reports were received that they were in good health, while 15 had died of causes other than tuberculosis. Of 96 children no report could be obtained because they could not be traced. Of the 905 children examined 436 had been vaccinated under the age of one year and 682 under the age of five years. In the histories of the 905 children, two instances of a benign tubercular infection were disclosed. Both children had recovered and at the time of examination were in good health. X-ray examination revealed in many cases the presence of minute, dense and sometimes calcareous spots in the hilum but no signs of progressive disease. One hundred per cent. of the cases, it is claimed, were found to be in good health, without signs of active tuberculosis; 86.9 per cent. gave a positive Hamburger's tuberculin ointment test; of the remainder, 4.8 per cent. reacted with 0.1 mg. Mantoux test and 5.4 per cent. with 1 mg. Only 2.9 per cent. were found to be tuberculin negative to all tests. 397 of the children were certainly exposed to continuous infection in the family, 301 were certainly not so exposed, while in 207 the exposure was doubtful or improbable. That there was no significant difference in the percentage of tuberculin positivity in the three groups was regarded as indicating that the positivity was due to the B.C.G. vaccination and not to infection from without. A comparison may be made between these figures of positive tuberculin tests after B.C.G. vaccinatign and the results of an investigation by Johannsen made also in Gothenburg during the same ten years 1927-1937. Of 3,373 children selected at random positive tuberculin tests were obtained in about 10 per cent. at the age of three, in about 20 per cent. at the age of six, and 40 per cent. at the age of ten. The figures among the vaccinated group are, therefore, significantly higher. It is claimed that this tuberculin positivity, obtained by controlled doses of B.C.G. vaccine, is an expression of a relative immunity, conferring a protection against tuberculosis which in some cases has lasted as long as ten years.

The eradication of tuberculosis is an aim which may yet be achieved. The approach to it has been continuous during the last fifty years and is proceeding at an accelerating rate. The appreciation of the true relationship between primary infection in early life and adult pulmonary phthisis can only encourage these hopes. The control of either involves a lessening of the other. For the child infected with primary tuberculosis, death or recovery are not the only alternatives for the infection. The sufferer may survive in apparently good health, only to develop after puberty that form of disease which carries with it a constant source of infection for others. Primary infection with tuberculosis is not confined to childhood, but it is very common in childhood. As with many other infections, the danger of the primary infection to life is at its greatest in the first years of life.

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The Young Surgeon After the War

By Daniel Whiddon, Esq.

AS many who have recently taken the Fellowship may be feeling anxious about their financial prospects when the war is over, it is well to assure them that, provided they can raise £3,000 capital, or have the backing or the assurance to borrow it, they can look forward confidently to making £20,000 yearly after five years. The method here outlined has been employed with success by several well-known practitioners, and the only possible snag in the scheme is that it may involve the loss of other things which, to some men, are worth more than £20,000 a year.

There are two kinds of surgeons, those who put what they can into surgery, and those who get what they can out of it. The first are the rank and file: they may be happy, but they never make real money. The second are the big shots, the men who drive the big cars. To the first, John

Hunter's advice was, "Don't think; try the experiment." The second need no advice; they know that the key to success is, "Don't experiment; publish a paper." To be a big shot one must publish, publish early, publish hard, publish often, and scatter reprints like autumn leaves in Vallombrosa. The young surgeon may object that ideas are hard to come by and must be tried and sifted before they are fit to put abroad; that writing takes time needed for practical work; that under these circumstances one paper of importance is all that can be produced in a year. The answers to these objections are: that ideas are hard to come by only if they are our own; that writing can be bought as much as the ink and paper that make it; and that one paper, with small modifications and skilful distribution over the world's press, will always make five.

The balance sheet of the successful surgeon works out as follows for the first year:—

Total capital, £3,000, borrowed at 5 per cent.

FIRST YEAR

Expenses

Living expenses	£1,000
Interest on capital	150
Literary secretary	208
Illustrator	350
Expenses (photos, blocks, etc.)	150
	£1,858

Earnings

Operations	£200
Coaching	400
	£600
Deficit	1,258
	£1,858

The most important items of expense this year are the literary secretary and the illustrator, and upon their proper selection will depend the whole success of the venture. The secretary must do typing and shorthand, but she must also have boundless tact to handle doctors, a comprehensive knowledge of medicine, and an interest in your career. The qualifications sound difficult, but there are such people among women who have trained as secretaries, switched over to medicine or nursing, but failed to find their vocation. A girl who is not exactly right must be sacked; one who is, is worth a yearly advance up to almost any sum, and will get an assistant for the hard work as soon as the dividends roll in. She must at first answer the telephone and do the letters, but her chief job is to keep up the literary output, and above all to keep an eye on the world's press and select work suitable for rehashing. Articles in foreign languages can be read in the abstract in Surgery, Gynæcology and Obstetrics or other journals, and translated by an agency if they seem important.

The output will consist of books and articles. A book has threefold value. It is the only form of medical writing that can advertise your name on the front page of the journals week after week throughout the year; it is the only way to gate-crash the practitioner's own home, through the publisher's representative, without the suggestion of importunity that is implied in sending reprints to total strangers; and if well written it will go on for years, with slight modifications from time to time, and pay yearly royalties. The subject should be simple and orthodox for three reasons. Firstly, because an advanced or really scientific work takes years of thought and labour to produce; secondly, because such a book is only read by post-graduates, a very limited clientele who will in any case never send you patients, but will become your future rivals; thirdly, because you must give the impression of a sensible, steadfast fellow, one who will always give good advice and do safe operations. Probably one book only will be produced in the first year. The secretary will do the rough work, but the surgeon will be forced to do much of the writing himself. By the fifth year, when the syndicate is in full swing, the output should reach from four to six books a year, the writing will all be done by the surgical assistants, and the surgeon himself need do no more than select the titles and check the proofs. The supply of subjects is inexhaustible. First there are the general subjects such as diagnosis, prognosis, treatment, applied anatomy, applied physiology, laboratory methods in practice, and so on; there are plenty of books already, but there is always room for another with a little more pep and more and better illustrations. Secondly, there are books on the surgery of one organ or system, the surgery of the umbilicus for instance. Thirdly, there are manuals of treatment of some group of diseases in general practice giving away the secrets of surgery with disarming frankness, but hinting ever so subtly at the things that may go wrong if the case is not sent to the right man.

The articles take an opposite line to the books—that is, they concentrate on the new, the bizarre and the unorthodox; they are meant to catch the eye and stimulate the imagination, so that when next a doctor meets a case with some puzzling aspect, something in his memory rings a bell and he says: "By Jove, I must try that young fellow who is curing toothache by cutting the descending roots of the fifth nerve." Subjects for these articles can be produced in unlimited numbers by a study of foreign journals, particularly the output of certain centres whose whole outlook is revised yearly, where one year everybody with a headache

has part of his splanchnic nerve removed, the next all those who complain of pain in the chest undergo total thyroidectomy, the next the only treatment for sciatica is an attack on the inter-vertebral disc. In selecting from this vast source of material, the secretary will concentrate upon those conditions which affect people at their period of maximum financial standing. Disease of the prostate, osteo-arthritis of the hip, cancer in all its forms are good material; tuberculosis of bones and osteomyelitis which affect the young and the poor are bad. Having found a suitable article, a rehash of its contents, a modification of the original technique, two or three personal cases, and as many pictures as the journal will accept, make a fine paper, which can then be reprinted and sent to every doctor on the register.

The illustrator is almost the most important member of the team, the bait on the hook, the centrepiece of the window display, and she must be chosen with care. The girls trained at Baltimore by Max Brodel are superlatively good, and well worth any salary. The job of the artist will be not only to illustrate your books and articles, but to keep sketches of all your cases and operations, laying the foundation for that *magnum opus* an operative surgery which will crown your career about the tenth year.

When the takings approach £10,000 a year a surgical assistant is a necessity. He helps at operations, does most of the visits and dressings, and all the infusions and transfusions. To him are handed over all patients who cannot afford your minimum charges, whatever they may be at the time, and all who are likely to do badly, allowing you to put fees as low as you like without loss of dignity, and to collect " personal " series in the 100 per cent. neighbourhood. He also does most of the writing, and therefore will in turn need an assistant after two or three years. Having laid your foundations carefully success is assured, as the balance sheet for the next four years will show.

SECOND YEAR

Expenses

Living expenses	£1,200
Interest on capital	150
Secretary	234
Illustrator	350
Expenses	150
	2,084
Repaid capital	500
	2,584
Balance	116
	£2,700

Earnings

From practice	£2,000
Coaching	400
Royalties	300
	£2,700

THIRD YEAR

Expenses

Living expenses (including better car and more entertaining)	£2,000
Interest on capital	125
Secretary	260
Illustrator	400
Expenses	150
	2,935
Repaid capital	1,500
	4,435
Balance	265
	£4,700

Earnings

From practice	£4,000
Coaching	200
Royalties	500
	£4,700

FOURTH YEAR

Expenses

Living expenses (with added entertaining and chauffeur)	£3,000
Interest on capital	50
Surgical assistant	600
Secretary	260
Assistant secretary	130
Illustrator	400
Expenses	150
	4,590
Repaid capital	1,000
	5,590
Balance	4,010
	£9,600

Earnings

From practice	£9,000
Royalties	600
	£9,600

FIFTH YEAR

Expenses

Living and entertaining, etc.	£4,000
Surgical assistant	750
Secretary	360
Assistant secretary	156
Illustrator	500
Expenses (including postage for reprints)	250
	6,016
Balance	10,684
	£16,700

Earnings

From practice	£16,000
Royalties	700
	£16,700

AFTER FIVE YEARS

Expenses

(Living need no longer be noted as expense)

Entertaining (two good parties a week)	£1,500
Three cars, two chauffeurs	2,500
First surgical assistant	1,000
Second surgical assistant	500
Secretary	360
Assistant secretary	156
Illustrator	500
Expenses	250
	6,766
Balance	19,134
	£25,900

Earnings

From practice	£25,000
Royalties	900
	£25,900

These notes have been written, partly to help those already started on a surgical career, partly to point out to those not yet qualified that much of what they read is no more than the unsupported brain-wave of some poor mutt in a distant hemisphere transplanted and embellished by a commercial syndicate, and unworthy of acceptance till it has been subjected to the searchlight of pathological principles. Ligature of the angular vein for facial sepsis comes into this category, and unfortunately somebody at Guy's has been teaching it. No registrar will own up to having done so, but nevertheless students have somehow got the tip that this is the latest and best treatment.

The idea was first published in 1910; it has been revived time and again ever since, but it will be found that its support comes entirely from two sources: publications from keen young surgeons, who are taken by the idea and have tried it in two or three cases, and syndicate publications produced on the scissors-and-paste principle. Surgeons like Mitchiner at St. Thomas's and Donald at the London Hospital, who as juniors had charge of large septic wards for many years and really do know what they are talking about, will have none of it. The operation is an imitation of ligature of the internal jugular vein for lateral sinus thrombosis, but the analogy does not hold. In the one the primary focus is walled off in bone, in the other it is in loose tissue and localised only by a protective barrier; in one the vein concerned is very large and the only one draining the part, in the other it is small and one of several; in one the point of ligature lies far from any infected zone, in the other it lies in it.

Surgical fads come and go, but pathological principles are eternal, and mammalian tissues were fighting the onslaught of bacteria millions of years before the Greeks drove back the Persians at Marathon. The principles of treatment in infection are simple and are based on the recognition of the essential wisdom of natural processes; they are to rest the whole inflamed part all the time, to avoid disturbing the protective zone at any time, and to interfere with the central zone only when there are necrotic tissues to evacuate. These principles may be translated in the treatment of severe facial infections as follows. First keep the patient in bed, keep his head still, discourage talking and facial movement, if necessary using strips of elastoplast as splints, and absolutely prohibit squeezing of the lesion. Secondly, apply heat or hygroscopic dressings, but limit surgical interference to slicing off the cuticle retaining pus with a razor blade, or picking out a slough in the centre of a well-marked hyperæmic ring; thirdly, leave all the surrounding areas alone. Around the main lesion bacteria are extending in the lymphatics, and the tissues are laying down zones of protection to check them. Any trauma in this zone will harm the tissues and favour the bacteria; if it is an incision and a ligature, it will form a fresh focus of infection, and if that ligature includes a vein the vein will be infected if it is not so already. Ligature of the angular vein is never helpful and is safe only where it is unnecessary, that is, where the zone of reaction has not reached the point of ligature and never will. In the less well localised cases, where it is more apt to be suggested, it is the most dangerous and unscientific interference imaginable, and may easily cause the death of a patient who would otherwise have recovered.

Sector News

Guy's Letter

THANKS to the supremacy of our Air Force, we have been as yet spared from the realities of air raids in the Borough. Our emergency organisation has not been called upon to deal with other than fictitious " casualties," but rehearsals and practices are still to continue, in order to keep us up to scratch.

The value of these rehearsals has been amply illustrated by the various air-raid alarms which have been sounded during the past week. The vast majority of people in the Hospital knew at once where to go and what to do ; the atmosphere of hurry which had been experienced before was replaced by one of quiet preparedness. On the other hand, a certain number of persons were inclined to hang about the College, the Colonnade, and the Medical Block stairs, and even to saunter in the Park. In so far as is possible, the authorities cause the sirens to be sounded only when danger definitely threatens ; there has been provided in the Hospital a place of duty or a place of safety for everyone who happens to be inside the boundaries when the warnings sound. Although dull and monotonous as yet, it will certainly add to our efficiency in the long run if our instructions are more strictly adhered to.

Professor Ryle has now arrived to take up full-time E.M.S. duties at this Hospital for the duration. He is to share a firm with Dr. Marshall, and will take out-patients for Dr. Hampson on Thursday mornings. We are glad to welcome him to the Hospital, and we anticipate much pleasure and instruction from his teaching.

N. A. N.

Joyce Green Letter

OUR excuse for the cutting off of communications from Joyce Green must be the amazing speed with which the situation, both local and political, has changed during the last three months. No sooner was an epistle penned than it had become obsolete in the light of rapidly changing events. Now, however, there is a temporary lull and matters can be briefly reviewed. Our convoy, which arrived in June and quickly shattered the air of peaceful calm which hitherto had surrounded the activities of the inhabitants, is old history, but it is still having its repercussions.

We were amazed and pained to read the other day, in a certain well-known newspaper, a letter to the editor from a member of the Dartford public. He complained that one afternoon, whilst at the local cinema, his attention was distracted from the romance depicted on the screen by a horrid odour which (upon investigation) was found to originate from the plaster-encased foot of a wounded soldier in the next seat ; was this sort of treatment fair to our boys ?—etc., etc.

We have noticed this kind of complaint to be not uncommon from relatives and friends of patients and have been at some pains to justify it, but when it comes from outside the hospital we give up altogether.

The local L.D.V.'s have reached heights of efficiency which sometimes embarrass certain members of the staff on returning home late at night ; perhaps the worst gaffe yet made was by the gentleman who stopped our Superintendent one evening :—

" Where have you been ? " came the question.

" To the Southern Hospital on business."

" Seeing the girl-friend home, eh ? " came the reply.

We have recently had great pleasure in the arrival of Mr. Turner from Pembury, to take charge of our surgical activities, and Messrs. Bulstrode and Franks from town ; we are expecting some new arrivals shortly, but these are at present unknown.

A. M. H.

Pembury Letter

IN the past we have become accustomed to conducting our rounds to the undulating wail of the siren, but quite recently, while we were discussing the ravages of tuberculosis, our attention was drawn to the more celestial spheres, where Messrs. Spit Fire and Hurry Kane were also conducting an excellent " teaching round." The description of their case is as follows. First you observe a loud extracardial sound, like the firing of eight Browning guns. This is followed by a long, crescendo, high-pitched systolic scream leading up to an extremely loud banging second sound. " At this point," said Dr. Spit Fire, putting his hands in his " Air Pockets," " you will observe what happens when a Nazi clot gets ' Stuka ' in British arterial highway." We thereupon directed our gaze to the point of infarction and noted a considerable effusion of smoke. " Finally," said Prof. Hurry Kane, " you will note that, contrary to what happens in other cases of embolism, the ' Functio Læsa ' here is much more marked in the clot than in the patient ! "

Our other aerial news concerns a member of our staff who was surprised to see a plane apparently jettison some sand in his direction. He was subsequently informed that the sand was in reality machine-gun fire. We are glad to say that the burst of fire, being none too well directed, first-class opinions on diseases of the kidney are still obtainable at Pembury.

Thus do we record the effects of the war here, but even so we carry on with business as usual, and all are in high spirits, hale and hearty.

N. M. J.

Farnborough Letter

THE attention which the enemy has been paying to the southern suburbs of London during the last few days has provided us with not only a more personal interest in the reports of the Air Ministry, but also until the kind of work which is envisaged in the epilogue to so many of those reports : " There were some civilian casualties."

At a time when the morning papers are out of date by mid-day and the evening papers are bought for their " stop press," our accounts, which must stagnate for nearly a week, can scarcely be called news. Who knows but that in a week the hospital may exist no more or may, on the other hand, have returned to its accustomed unhurried ways.

But the season of suburban raids seems to have set in, and no doubt the succession of events that till a few days ago was only of the imagination and to-day is still a novelty may, in a week, be a well-tried routine. An unfamiliar drone overhead; the question, " friend or foe ? " The siren which answers the question ; then the windows opened, the blinds drawn, beds moved, patients shepherded downstairs for greater safety ; students racing upstairs for a better view from the roof. Then the wait ; perhaps a distant rumble ; perhaps a not so distant thump, and the windows rattle ; perhaps nothing—but always an excuse for a drop of brandy. At last the " All clear," and a late move to lunch, which is even later.

G. L. L. R.

Orpington Letter

THE major events of the past fortnight have been a dance, sponsored by the Nurses' League, and an E.N.S.A. Concert.

The dance was held on Friday, August 9th, in the Reception Hut, which lost all its day-time drabness and, suitably decorated, made an excellent dance hall. With Johnson in command as M.C., the whole evening was a great success. We were very pleased to see many members of the Army and Air Force from local units, as well as a large number of Guy's men from other parts of the Sector.

Next evening a concert for the troops was given by E.N.S.A. An extremely talented team was headed by Madame Laelia Finneberg, a singer of world-wide repute, and compered by George Barker. The concert was thoroughly enjoyed by the troops, and E.N.S.A. are to be highly congratulated on the very excellent standard of the show.

We trust it will not be gathered from this account that we have no work to do ; on the contrary, our numbers are being kept well up by frequent convoys from Guy's and the Coast Hospitals. In addition, during the last few days we have had several " aerial visitors," none of whom, however, has left any distinguishing mark upon our precincts.

A. T. M. R.

Correspondence

Farewell !

To the Editor of the GAZETTE

SIR,—Would you be so kind as to allow me, through the medium of the *Gazette*, to express my sincere gratitude to all my friends at Guy's for the friendship and hospitality that they have extended to me ever since I came to this country.

In particular do I wish to thank my teachers for all they have taught me, and the rugger men for the seven years' comradeship. The memory of my years at Guy's will indeed always be a happy one.

I sincerely hope that we will meet again some day.

Goodbye and best of luck !

Yours, etc.,

J. VAN A. STEYTLER.

The Students' Club,
Guy's Hospital, S.E.1.

The Starlings' Review

To the Editor of the GAZETTE

SIR,—I have for some time attended the " Starlings' Reviews " at Guy's, and have for the most part enjoyed them thoroughly ;

while I do not maintain that all the jests told should be suitable for a Victorian drawing-room, I think I am not alone in raising a protest against the unmitigated filth that was poured out at the last Review.

The entertainer, whether a member of the Hospital or not, should not assume that, because he is performing before a hospital community, there will not be in his audience ladies and gentlemen who do not wish to have his pornography inflicted upon them.

The Review is acting against its own interests if it alienates a part of its audience; surely it is possible to put on an excellent show without causing some of us to be ashamed that we came accompanied.

Yours, etc.,

BRIAN D. JOHNSON.

Guy's Hospital,
S.E.1.

Love

To the Editor of the GAZETTE

SIR,—I should like, if I may, to reply to Harley Wimpole's letter in your recent issue, referring to my article on Love.

I agree that many of the symptoms I describe are merely indications of a vago-sympathetic imbalance, but since in most diseases the symptoms are due to one pathology, whether it be cardiac failure or intestinal obstruction, surely it does not matter so long as an accurate clinical picture is obtained.

From Dr. Wimpole's letter I observe a detail for small points, a rather obstinate and sullen point of view, and an expression that Love is not a disease but a pure state.

Are you sure, my dear sir, that you too are not suffering from Love.

Yours, etc.,

" MODFREY LYNNE."

Guy's Hospital, S.E.1.

" America Revisited "

By W. H. Ogilvie, Esq., M.Ch.

(*continued*)

Some days later I met in the train a Canadian well acquainted with these northern mining camps, whose talk of the arctic aeroplane services was like a fairy story. He said that this arctic flying is unlike anything else in the world. It would give any hardened military or commercial pilot a nightmare, and the men who undertake it are and have to be the toughest in the world. The Canadian planes carry four times as much freight as all the rest of the world put together. First, there is all this mining. All the men and their furniture, their luggage, equipment and food, the material for their houses, bar wood, have to be taken up, all the heavy mining machinery and its fuel transported, and the ore carted away again. Some companies have planes that will carry 35 tons. The fire fighting is done by plane. As soon as a fire is spotted from a patrol plane or an observation tower, a convoy of planes sets out and lights on the nearest lake. They carry men, gasolene-operated pumps, and lengths of hose, and will run water miles across the forest in no time. Apart from these official services, there are a host of independent pilots owning their own planes who will take on any job they are asked to do in the way of transporting passengers, kit or even cattle. Cows and horses are strung up by girths under the fuselage and left in the breeze. These men must be prepared to do anything and mend anything. If they try to land in a clearing in mid-winter and break a ski, they are probably 1,000 miles from any help; they must make an emergency repair with an axe and felled timber. In the same way they will mend wings, struts or wires well enough to get home. And they cannot afford to scrap the machines; one man bought his plane second hand in 1922 and has used it continuously ever since. It has had two new engines and any number of home-made repairs, and still goes well.

Wednesday, October 12th

I spent a lot of the morning with Wookey, who has been given cancer of the upper alimentary tract to look after, whence he has reached the œsophagus. He told me he has two living resections out of four operations, and of the other two one died of a coronary attack two or three weeks after the operation. He is worried at present by the question of reconstruction. He finds the ante-sternal skin tube very delicate, and the junction of its lower end to the gastrostomy apt to break down repeatedly owing to digestion. His last idea is not to do a gastrostomy, but, at a subsequent operation to open the abdomen and bring the stump of œsophagus left after

œsophagectomy to the surface by mobilising the stomach. He will then have a junction of squamous epithelium to its like.

Going back to buccal cancer, he started by going over the surgical results of the previous ten years. He found that 30 per cent. of the lips were alive, but only one cancer of the tongue. He divided his cases into the three rough groups of lip, tongue and buccal cavity. Lip cancer is a male disease, limited to the lower lip. It is a local disease, rarely spreading beyond the anterior triangle. It has two ends—the primary growth and the secondary glands—and never seems to occur or recur in the intermediate tissues; even at P.M. it is all above the clavicles. He does not find Broder's classification or any histological grouping of any real value, and the later history of cases carefully followed bears out this view. For discussion of results he divides them into four clinical groups (illustrated by photographs of life): (1) Flat plague; (2) Lump; (3) Fungating; (4) Advanced. Glands do not seem to depend so much on the type and size of the primary growth as on the age of the patient: the younger he is, the earlier and the more the glands.

For radium technique and figures it is necessary to refer to the Toronto report. Surgery is indicated: (1) For dissection of lymphatics in neck; (2) For excision of jaw when involved with growth; (3) For palliation, (*a*) ligature of external carotid for hæmorrhage, (*b*) nerve section for pain. They do not believe that radiation has any value in the glandular field, or rather that it cannot cure, and recommend surgical dissection of the field, particularly in the early case where there are no palpable glands. Wookey does a radical block dissection, taking the sternomastoid from the clavicle to the superior curved line, and the internal jugular. He never does two sides at once, and never ligatures second jugular vein under three weeks. Internal carotid must never be ligatured, even in a child.

In the lip and most tongues radium is used for the primary growth. Quite a number of these patients die of cancer elsewhere—stomach, rectum and so on. He is tempted to feel that cancer is the local manifestation of some general disease, like the rose spots in typhoid.

In between these talks with Wookey I watched Shenstone and Janes doing a pneumonectomy for cancer. Anæsthetic—closed circuit cyclopropane. It was a really lovely bit of work, and a joy to those who believe in the unity of all good surgical technique. He worked neatly and beautifully with the ordinary instruments, chiefly Lahey scissors and Moynihan gall bladder forceps, without a tourniquet; he shed no blood and worked right down to the mediastinum, ligaturing vessels at their origin, bringing glands and aerolar tissues out to the hilum, suturing the bronchus with interrupted stitches and suturing pleura over the stump in a neat line. The pulmonary artery was exposed to its bifurcation, and each vein dissected absolutely clean before it was doubly ligated with fine silk.

I made a hurried visit to the children's hospital, where Robertson sang the praises of the double duodenal tube, and referred to an important paper (Taylor, Weld and Harrison, *Canad. Med. Assoc. Journal*, xxix, pp. 227-236, 1933) on intestinal obstruction. He told me his spina-bifida of last year, with the colostomy and transplanted ureters, died of renal infection.

Hurried back to see Harris do a gall bladder, and then to lunch at the club with Gallie, who had invited all the young men of the General and Western. After lunch I went out to the Western (T.B.) Hospital to see Jaynes do a first-stage thoracoplasty, and got back to Harris's to pack and catch the train to Boston. A night journey lasting from 6 p.m. to 9 a.m. is fine. One has time for dinner to start with and a proper wash and breakfast next morning. All the part north of Boston seen in daylight had been swept by the tornado, and trees and in some places houses were broken everywhere. Many trees were uprooted, but there were also areas hit by a gust where the trees had all gone down together to about 45 deg., and others where a group of trees were snapped across halfway up. Two days later, going from Boston to New York, we passed along the coast where the maximum fury of the storm had been felt. The houses were mostly wood, and many of them had been flattened down, or had one side or the top storey torn out.

In New York I met a young surgeon who spoke to me about his country place. He looked a serious minded and reliable fellow; he told his story without any of the fancy frills or mock solemnity of the wag, and he was too young to be likely to pull the leg of a guest of his college to whom he had just been introduced. Yet here is the tale. His house, a one-storey building on a small island in Long Island Sound, was lifted up bodily and deposited without damage on another island three miles away. Next day an aerial photograph of the house appeared in the papers, saying it was the only house left standing in those parts, but not mentioning that it was not standing in those parts before the wind came.

He hurried out with his wife and they found all the furniture and crockery intact, a few things upset, but very little broken. The only trouble was that the new island was in shallow water, so that it was very difficult to get there by boat, and impossible to bring in rafts on which they could float it back to the site that really belonged to them.

Sport and Hospital Information, etc.

Squash Rackets Club

A MEETING of students was held on Thursday, August 1st, to discuss the formation of a Squash Club. The following officers were elected :—

President.—J. B. Blaikley, Esq., F.R.C.S.

Captain.—W. J. Lewis.

Hon. Secretary and Treasurer.—P. R. C. Manning.

Committee.—The above, with F. G. Stoddart (fourth year representative), P. F. E. Brown (third year representative), J. F. Mordaunt (dental representative).

Fixtures are being arranged with other hospitals and with London clubs, and a provisional ladder has been drawn up.

Another general meeting will be held in the near future to discuss further details of the management of the club. Information may be obtained from any member of the committee.

Pass List

UNIVERSITY OF LONDON

FIRST EXAMINATION FOR MEDICAL DEGREES

(*External*)

July, 1940

L. W. Bowen
D. J. Chapman
D. O. Lloyd
N. T. McNeil
J. D. Wallace
M. Wilks
F. R. M. Young

Changes of Address

J. M. Brown, Lt. R.A.M.C., 49*a*, Trinity Square, S.E.1.

R. M. Corker, F./O. R.A.F. (V.R.), Hook, Surrey.

H. E. Edney, A.D. Corps, c/o Messrs. Glyn, Mills & Co., Kirkland House, S.W.1.

Harold E. Harding, B.M., B.Ch., Department of Pathology, The University, Sheffield.

E. C. Hughes, O.B.E., M.Ch., Woodside, Pembury, Kent.

H. Douglas Lamb, Surg.-Lt. R.N.V.R., 81*b*, Foxgrove Road, Beckenham.

G. A. M. Lintott, Maior R.A.M.C., 27 General Hospital, c/o Army Post Office.

K. G. Pascall, Royal United Hospital, Bath.

Prisoner of War

Anthony Crook, Capt. R.A.M.C., previously reported missing, is now notified by Red Cross a prisoner of war.

Births

DARLOW.—On July 28th, 1940, at Homeleigh Nursing Home, Edgbaston, to Joyce (née Garratt), wife of J. E. Darlow, of Boston, Lincs.—a daughter.

WALLACE.—On August 15th, 1940, at Epsom, to Maureen (née Robarts), wife of L. J. Wallace—a son.

Marriages

IMRAY—LEE.—On Saturday, 3rd August, 1940, at Southwark Cathedral, Lieutenant Michael Allan Imray, R.A.M.C., younger son of Mr. and Mrs. H. P. Imray, of Norbury, and Marguerite Joan (Peggy) Lee, only daughter of Mr. and Mrs. H. N. Lee, of Kingston-on-Thames.

O'SHEA—BUTLER.—On August 8th, 1940, at Holy Trinity Church, Newquay, John Patrick, son of the late Dr. J. J. and Mrs. O'Shea, of Chipping Norton, to Elsa Audrey, daughter of the late Mr. Alfred and Mrs. Butler, of Newquay.

SALMON—KING.—On August 10th, 1940, quietly, at Kingston-on-Thames, Capt. L. F. W. Salmon, R.A.M.C., of Merton Park, S.W., to Maude Kathleen (Pip) King, of Esher.

YERBURY—DUNN.—On Saturday, July 27th, 1940, at Bombay Cathedral, Richard O. Yerbury to Drusilla Mary Dunn.

Death

LAMONT.—On August 14th, 1940, at Aldershot, suddenly, Gerald Reburn, Lieut. A.D.C., only son of Mr. and Mrs. A. Lamont, Walrond Road, Swanage.

EDS. { N.A.N. / B.S.L.

GUY'S HOSPITAL GAZETTE

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PASSIM

THE adoption by the enemy of the tactics of "nuisance" raids at night raises a series of problems of both national and medical importance. These problems are distinct from those resulting from mass bombing attacks such as were perpetuated in Spain and throughout Europe this year. These latter have been anticipated, so far as is practicable, and the efficiency of of the protection provided by standardised types of shelters has been satisfactorily proved. The danger of the nuisance raider to life or property is insignificant; it represents, however, a powerful weapon aimed not only against the output in working hours of our factories, but also against the health and efficiency of the civil population. The cost to the enemy of such raids is small, both in planes and in petrol; they will certainly be continued so long as they continue to bring about results. Lack of sleep reveals itself immediately in mental irritability and is soon reflected in a falling off in powers of concentration and of application to work. Regular undisturbed sleep is indirectly an important factor in maintaining the nutrition of the body and resistance against infections. The amount of sleep required by any person varies according to habit and age, but is seldom less than eight or nine hours on the average for either black-coated or for manual workers. The first four hours of sleep are the deepest and are therefore the most important to the body; those whose occupation entails frequent disturbance during the night soon learn to sleep and to awake refreshed from any odd hour of leisure that they enjoy during the day. Acquisition of this valuable habit would do much to lessen the evils of wakeful nights. Individuals certainly can and have lived efficient lives whilst enjoying but two or four hours of repose each night, and in times of stress others have worked or fought for many days without respite, but if this war is to continue for another year or more, regular sleep at nights should be assured for all. Secondly, in these warm summer days and nights, the dangers to health of herding together for several hours a mixed crowd, into a closed space, would seem to have escaped attention. The nutritional standards of this country are well maintained, but should they fall and the influenza menace spread to us next winter after ravaging the continent, the communal shelters must inevitably aggravate the spread of the infection. The meningococcus spreads rapidly round a barracks if the beds are not more than a certain minimum distance apart, a distance that cannot be assured in a shelter in which a group of people may spend seven or eight hours of the night. As winter approaches, the rapid transition from warm bed to cold shelter will increase the incidence of common colds and increase the threat of pneumonia to the aged. There are many other problems of equal importance, but less directly of medical interest that arise from these nuisance raids. In all, but in a different way, they present just as great a danger to the country as the bombing raids which can be so much more simply protected against. The problem must be tackled energetically before autumn and winter arrive. The comparative value of sleep and of security must be assessed, the danger from sporadic and indiscriminate bombing is widespread, but is to the individual extremely slight; sleep is most certainly essential.

At this hospital, as a temporary measure, adequate accommodation in places of comparative safety throughout the wards has been provided for the resident staff and students. So far as is consistent with the availability for immediate mobilisation of our emergency casualty organisation, comfortable sleep has been ensured for the majority. The possibilities of the provision of similar facilities for the nurses is under energetic investigation; their shelter, ideally chosen as posessing absolute protection against all but the

most direct of hits, does not allow sufficient space or comfort for sleep nor for efficient ventilation of air. The journey from room to shelter and back perhaps two or three times during the night renders the disturbance of sleep complete; we have no doubt however, that all that can be done to ease these conditions will have been arranged before this appears in print. In the wards, the patients are disturbed as little as possible; those on the balconies are brought in, but the others for the most part, sleep on undisturbed.

The problem is one of national importance: it may be possible to institute a different system of warnings; the siren when danger is real and shelter imperative, a different siren or no siren at all when the danger to individuals is more apparent than real. Meanwhile, those who live in houses may well adapt their internal dispositions so as to sleep downstairs and have their living room upstairs. The problem is more acute for those who reside in top floor flats or apartments, but here again, in the absence of gun fire, the best answer to the nuisance raider is probably to sleep and take the risk of an unlucky bomb. In anticipation, however, of indiscriminate mass night bombing raids, in residential areas, the possibility of sleeping regularly in shelters, or in specially protected rooms must be fully employed before the present attacks cease to have a "nuisance" value only.

It is not easy for all to sleep in unfamiliar surroundings, or to settle down at ease after the warning has sounded. Nerves are on edge and mental calm is difficult to attain. Insomnia will become an ever more pressing problem, especially for those of middle age. "Drugged" sleep is abhorrent to the general population, but mild sedatives and hypnotics may be of very definite value. They have disadvantages also, and a great responsibility will rest upon the medical profession with regard to the advice that they must give their patients upon the use and misuse of such drugs.

The prevention of the spread of common infections, consequent upon the use of communal shelters is an equally difficult problem. The big cinemas have faced the same question, and answered it by the installation of costly ventilation and air conditioning apparatus. Such is of course impracticable in the majority of air-raid shelters; when the common cold commences to appear, the familiar disinfectant spray and prophylactic permanganate gargles will inevitably be advocated. The effectiveness of these measures will be of considerable interest and importance.

▭

IT is probably not generally known that postal packages may not be redirected from a private address to one in a censorable country. Copies of the *Gazette*, which have been redirected to an address in Southern Ireland are continually being returned to the *Gazette* office. On the other hand, the *Gazette* may be sent direct from the office to any desired country, so it would be a great advantage if all who desire their copy to be sent to any censorable country would communicate the address to the *Gazette* manager.

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TO avoid the extra post of additional application, would subscribers kindly forward their subscription to the *Gazette* (12/6), now due, to the Manager, *Gazette* Office, Guy's Hospital, S.E.1.

Penetrating Wounds of the Chest*

A Clinical Lecture delivered by Dr. J. A. Ryle, F.R.C.P.

* Republished, with modifications, by kind permission of the Editor of *The Lancet*.

GENTLEMEN,—The problems relating to war wounds which must shortly confront the hospital staffs of this country on an increasing scale will probably resemble closely those encountered in casualty clearing stations during the last war. In general, however, it may be anticipated that cases will be admitted in quicker time, for under the conditions then obtaining, six, twelve and sometimes twenty-four hours or more elapsed between the wound in the line and admission to the C.C.S., the first unit at which major surgery and expert nursing could be provided. Complications due to infection should, for this reason alone, be less frequent. Effective treatment of shock and hæmorrhage will be initiated earlier. More abdominal and cranial wounds will be successfully handled. Improvements in surgical technique will bring improved results in the case of limb wounds and fractures. Possibly the treatment of penetrating wounds of the thorax will witness less change of method, although the availability in some regions of skilled thoracic surgeons, mobile chest units and special chest centres will undoubtedly play an important part. Changes in types of missile and fragment may alter the incidence of different types of wound.

I have recently unearthed a notebook containing

the records of 130 cases of penetrating wounds of the chest, admitted under my care at No. 10 C.C.S. (situated at Remy Siding, about eight miles from Ypres) during the second six months of 1917. These notes include a brief description of wounds, symptoms, signs and progress; remarks on the bacteriology of hæmothorax specimens; a number of temperature charts; in many instances the radiological localisation of foreign bodies; and in many fatal cases an abstract of post mortem findings.

For the physician there is no more interesting group of war injuries. Every variety and combination of thoracic symptoms and signs may be encountered, and their value is in no wise lessened by access to expert radiology. Judgment in the matter of intervention or non-intervention must be critically cultivated. In the investigation of cases clinical, radiological and bacteriological methods each have their special contribution to make. Whenever possible the co-operation between physician, surgeon, radiologist and pathologist should be close. I was fortunate in those days in having the surgical co-operation of Captain J. W. Dew, M.C., and the pathological help and inspiration of the late Major Adrian Stokes, D.S.O., who subsequently held the Chair of Pathology at Guy's.

Chest wounds should be under the primary care of the physician when no specialist chest surgeon is available, and the specialist chest surgeon should always have a physician attached to his service.

The brief account of my own experience which follows, even though it is now 23 years old, may, I believe, be useful to others who have yet to see chest wounds on a large scale. As a preface to the description of methods employed and principles observed I append a classification of cases into convenient groups for guidance in prognosis and treatment.

CASE MORTALITY

Total cases 130
Total deaths .... 30 (23 per cent.)

As no cases were discharged to the base until shock, sepsis and hæmorrhage were under control and they were judged fit for the long train journey, it is unlikely that there was a high toll of subsequent deaths. Favourable reports on some of the more serious cases were ultimately received from the base or from England.

In four of the fatal cases there were serious multiple wounds in addition to the chest wound. Seven cases died within twenty-four hours of admission. In one there was perforation of the gullet as well as the lung, and a tear in the aorta plugged with thrombus; the patient survived to the third day. In five there was damage to diaphragm and liver or spleen. Operation (usually for drainage of an infected hæmothorax) was performed between the third and the fifth day in fifteen of the fatal cases. From my notes of these cases it is difficult to suppose that this early mortality could have been appreciably reduced.

CLASSIFICATION OF PENETRATING CHEST WOUNDS

GROUP I.—*Small penetrating wounds without hæmothorax*, but with hæmoptysis, pleurisy, a small pneumothorax or subcutaneous emphysema.

13 cases= 10 per cent. of total. No deaths.

GROUP II.—*Through and through wounds with sterile hæmothorax.*

12 cases=9 per cent. of total. No deaths.

In neither of these groups was operation necessary, except on occasion to remove a fragment from under the skin.

GROUP III.—*Small or medium wounds with closed sterile hæmothorax.*

53 cases=40 per cent. of total. Deaths, 3 (6 per cent. of group).

This was the largest single group. Treatment, apart from general measures and local treatment of surface wounds, consisted in aspiration of the hæmothorax fluid in appropriate quantity and at appropriate times. Rib re-sections and exploration for intra-thoracic foreign bodies were very rarely necessary.

Thus in these first three groups, comprising 60 per cent. of all the cases, surgery was seldom indicated.

GROUP IV.—*Small, medium or large penetrating wounds with closed infected hæmothorax* (anærobic or streptococcal).

18 cases=14 per cent. of total. Deaths, 4 (22 per cent. of group).

In all cases of this group, operation for drainage of the pleura and sometimes removal of a foreign body was necessary.

GROUP V.—*Large penetrating wounds, with "leaking" hæmothorax or "sucking" wounds, comminuted ribs, etc.*

25 cases=19 per cent. of total. Deaths, 14 (56 per cent. of group).

In the early stages plugging of the "sucking" or "leaking" wound with moist gauze was employed. In those which survived the immediate shock and trauma operation for drainage, trimming of comminuted ribs and sometimes removal of foreign bodies was performed later.

GROUP VI.—*Through and through wounds with infected hæmothorax.*

7 cases= 5 per cent. of total. Deaths, 5 (70 per cent. of group).

The principles of treatment were the same as for groups IV and V.

GROUP VII.—*Penetrating wounds of the chest complicated by damage to diaphragm, liver, spleen or other intra-abdominal trauma.*

4 cases=3 per cent. of total. Deaths, 4 (100 per cent. of group).

Such cases rarely come to operation.

GROUP VIII.—*Wounds of heart and pericardium.*

As a matter of interest I have also analysed those cases in which a penetrating wound of the chest was complicated by a wound of the pericardium, as shown radiologically by the position of foreign bodies within or sticking to the pericardium and the presence of pericardial friction or hæmopericardium. Of such cases there were nine. In one the foreign body was located in the heart and there was a hæmopericardium. In two the foreign body was located in the pericardium and there was a hæmopericardium. In five the foreign body seemed adherent to the pericardium and in three of these there was pericardial friction. All of these cases were evacuated to the base. The only fatal case lived forty-eight hours and was found at necropsy to have a hole in the pericardium, with pericarditis, and a hole in the right auricle. The largest fragment in a surviving case was a rifle bullet lying apparently within the pericardial sac.

THE MANAGEMENT OF CASES

If a case is admitted in bad condition not attributable to other wounds the cause may be :—

(1) A "leaking" or "sucking" hæmo- or pneumothorax, calling for immediate plugging with wet eusol gauze and a firm pad with strapping or binder.

(2) A tension pneumothorax calling for relief with the needle. In point of fact, I never saw this as a complication of a penetrating wound; it is more likely to follow a crush injury.

(3) A penetration of the diaphragm by a fragment passing through the chest and lung, with damage to one or more of the abdominal viscera.

A "leaking hæmothorax" usually shows a large entry or exit wound from which there is a considerable flow or trickle or rhythmical spouting of blood or bloody fluid. An audibly "sucking" or "open" pneumothorax explains itself and calls for similar immediate treatment.

The further immediate treatment in all such cases is the usual treatment for shock or hæmorrhage. Frequently there is remarkable improvement within a few hours. At some clearing stations early operations were performed in the case of wounds due to larger fragments, but except in a selected minority of cases I was never fully persuaded, under the conditions then obtaining, of the advantages of early intervention, provided a close twice daily watch for infection of the hæmothorax was maintained.

The procedure in cases of a closed or a "plugged" hæmothorax, apart from appropriate nursing, postural measures and relief of dyspnœa and pain, was to wait until the second day and then to needle and withdraw a syringe-full of blood. This should be examined with the naked eye and the nose. The change from the appearances of normal blood or bloody effusion to the more fluid and purple appearance of laked or hæmolysed blood is soon appreciated. While it remains unlaked and sweet there is no heavy anærobic infection. In the presence of laking and smell the chest should be drained and there is no need to await the bacteriological report. Guided by the patient's condition and the temperature chart, subsequent needlings for inspection and culture are carried out on the third or fourth and, if necessary, on subsequent days. Major Stokes sometimes anticipated a positive culture by centrifugalising chest fluids and making a direct examination of films for bacteria. Only in later stages and with a streptococcal, staphylococcal or mixed infection does hæmothorax give place to pyothorax. In aseptic cases a blood-stained may give place to a serous effusion. As a rule there is little or no air detectable by physical signs in a recent closed and sterile hæmothorax. When signs of a pneumohæmothorax develop in a closed case, it is generally in concert with a deterioration in the patient's condition and the development of a muddy sallow colour. The signs then indicate an infection with gas-forming anærobes. Such a change should usually be anticipated by routine needling of the chest.

In the graver cases of "leaking" or "sucking" chest wounds which survive the first day or two, surgical intervention will nearly always become necessary for purposes of drainage of an infected effusion, toilet of the wounds and comminuted ribs and, when feasible, removal of the foreign body. The time for such action must be determined by the conditions obtaining in the individual case. I have no doubt that with earlier admissions and better treatment of hæmorrhage and shock, early intervention will be undertaken more frequently than it was in 1917, and that the primary operations with removal of fragments,

repair and closure, of which Professor Gask was one of the pioneers in the C.C.S. next door to mine, will become more usual and save lives. Such primary operations, however, should never be undertaken unless the patient is likely to remain under close observation.

SOME OTHER SYMPTOMS AND COMPLICATIONS

Solid lung or traumatic pneumonia sometimes developed without or in addition to hæmothorax. Hæmoptysis after admission was not very frequent and rarely profuse. Bronchitis or broncho-pneumonia in the uninjured lung, presumably from an inhalation infection, occasionally occurred, and in one of my fatal cases a broncho-pneumonia, thought to be due to simultaneous gassing, complicated a leaking hæmothorax.

Contralateral collapse—that is to say, massive collapse affecting the lower lobe or lobes of the uninjured lung—attracted much attention and interest. It was so rare, however, among my cases, although carefully sought for, and apparently so frequent at the base hospitals, that I concluded that the long journey in the train to the base, with the patient lying on his sound side, was an important contributory factor. Furthermore, a similar contralateral collapse was sometimes reported in cases of buttock wounds without chest injury. Immobilisation on one side and hampered respiration, combined perhaps with viscid mucus or sometimes blood in a bronchus, would seem to offer the best explanation of this sequel of a chest wound. Its symptoms and signs, although sometimes mistaken for those of consolidation, were not usually difficult to interpret.

RADIOLOGY

Straight and stereoscopic X-rays with a mobile plant often gave help by determining both the size and position of fragments, and confirming or modifying clinical assessments of physical signs. It was rarely surgically justifiable to pursue a search for small fragments. Large fragments were necessarily more dangerous and were generally complicated by sepsis. The radiologist to-day, with improved apparatus and methods, may be expected to give even more effective help than he did in the period under review.

ILLUSTRATIVE CASES

GROUP I.—*Penetration without hæmothorax*

Case 1.—Small shell-wound left lower chest. Much respiratory pain and left shoulder-tip pain. No hæmothorax, but marked limitation of movement. X-rays show small fragment on dome of diaphragm and heart drawn to left. T. 100.2 deg., P. 80, R. 28. Within twenty-four hours air entry improved and apex beat in normal position. T.P.R. normal. Evacuated to base.

GROUP III.—*Penetration with sterile hæmothorax*

Case 2.—Entry wound below right clavicle. Large hæmothorax. X-rays show rifle bullet in lower limit of right pleura behind. Cultivation of hæmothorax fluid on third and fifth days sterile. Temperature only once exceeded 101 deg. and fell to normal by seventh day. Aspirated once on third day. Evacuated to base.

GROUP III.—*Sterile hæmothorax with pericardial trauma*

Case 3.—Wounded 15.7.17. Multiple wounds right leg, left hip and thigh, left chest (penetrating). Left hæmothorax aspirated (one pint) on 16.7.17 and again on 21.7.17. Cultures sterile. X-rays show foreign body on left aspect of pericardium moving with heart-beat. Pericardial friction on 17.7.17. Developed a purulent bronchitis. Discharged to base on 23.7.17. Later report from base " Good in respect of all wounds and general condition, and marked improvement in left chest."

GROUP IV.—*Through and through wound with " sucking " exit wound and infected hæmothorax*

Case 4.—Wounded 5.11.17. Through and through bullet wound from right of sternum (second space) to left axilla. Exit wound " sucking " on admission thirty-six hours later. Condition bad. Eusol plug and pressure. First culture 6.11.17 sterile. 7.11.17 lobar consolidation right side. 8.11.17 specimen from left chest showed bacilli in direct film; later the cultures gave gas. 9.11.17 pleural incision and drainage of fluid just beginning to smell. Carrel's tubes. 19.11.17 much improved. Pneumonia resolving. Evacuated to base on 21.11.17. Report from England, " Lung partly collapsed. Wounds soundly healed. Boarded out."

Case 5.—Severe through and through wound of left chest. Huge, gaping anterior exit wound, with fractured ribs and suction. Condition very bad. Posterior wound plugged with eusol gauze. Anterior wound stitched with B.I.P.P. as temporary measure. On second day needling gave sero-sanguineous fluid from which anærobes were grown. On third day X-rays showed no F.B., small effusion and very little cardiac displacement. On fourth day, condition having improved somewhat, toilet of both wounds and loose bone fragments removed under anæsthesia. While chest was open breathing became very bad and death

followed rapidly. I have looked back on this case with regret, believing that a longer period of delay might have prevented an operative death.

GROUP VII.—" *Leaking* " *hæmothorax with perforation of diaphragm*

Case 6.—S.W. back, penetrating chest. Leaking right hæmothorax; great pain and distress. Resuscitation measures and morphine. Died in twelve hours. Necropsy showed perforation of right lower lobe and diaphragm, and a large fragment lying on liver. Much sticky mucus plugging bronchi of left lung, which showed patches of collapse in lower lobe.

GROUP VIII.—*Wound of heart and pericardium*

Case 7.—Wounded 9.6.17. Dirty wounds of right upper arm and shoulder. Small penetrating wound of left chest with hæmothorax. X-rays also show small foreign body in heart muscle and hæmopericardium. Cultures from hæmothorax on 12, 13 and 14.6.17, all sterile. Evacuated to base on 15.6.17 with normal temperature; pulse 90; respirations 28.

SUMMARY AND CONCLUSIONS

In a consecutive series of 130 cases of penetrating wounds of the chest admitted to a C.C.S. in 1917,* the total mortality was 23 per cent. In approximately 60 per cent. of the cases there was no indication for surgical intervention. The commonest type of case calling for watchfulness and decisions was the closed hæmothorax. Over 60 per cent. of all cases fell into this group. Of these, three-quarters remained sterile and were treated conservatively with aspiration. The gravest cases, as is well recognised, were those with a leaking hæmothorax or sucking pneumothorax or diaphragmatic injury. Simple drainage of the pleura (generally with rib resection) on account of infection was the most frequent operation. Wounds of the pericardium with small fragments did not cause particular anxiety.

With prompter admission of cases, earlier and better treatment of shock and hæmorrhage, a lower incidence and better treatment of infection, and earlier expert surgery with repair and closure in a selected group of the graver " open " cases, a lowering of mortality should be possible. Improved technique should not, however, tempt the surgeon to interfere in those types of cases which have here been classified into Groups I, II and III.

The examination of specimens obtained by routine needling plays an important part in the management of cases. Such specimens should be examined with the eye, the nose, by direct examination of films for bacteria, and by cultivation.

Cases with penetrating wounds of the chest should be submitted to as little movement as possible, and transportation from one hospital to another in the earlier stages should only be sanctioned on some very urgent plea. The probable contribution of posture to the development of contralateral collapse should be borne in mind.

* A group of cases admitted during my absence on leave was not included.

Notes on Peripheral Nerve Injuries

By H. A. Harley, Esq.

I HAD the good fortune recently to attend a course of lectures on " The War Surgery of the Nervous System " at the British Post-Graduate School. Much valuable information was gained during an extremely well organised week. The Dean of the School has kindly permitted me to incorporate some of this information in a series of articles in the *Guy's Hospital Gazette*, which I hope will prove of interest and value to others at Guy's.

The remarks on peripheral nerve injuries are based largely on lectures given by Prof. Hugh Cairns, Mr. Harry Platt, Dr. N. S. Alcock and Mr. F. H. Bentley.

Two types of nerve-block are recognised—physiological and anatomical. The former is diagnosed only in retrospect following rapid and complete recovery, and is due to such injuries as concussion or contusion of the nerve.

Anatomical block may be produced by compression, traction, or incision of a nerve. In each case the block may be partial or complete, and well-known syndromes are associated with compression, incomplete division and complete division.

War injuries differ from civilian injuries in several particulars. In the former there is a much greater risk of sepsis, so that primary suture is almost never indicated. There may be gross loss of nerve tissue, while damage to other tissues is often severe. It is interesting to note that a high percentage of war injuries undergo spontaneous

recovery. In a series of 3,000 cases reported in the World War of 1914-18, 1,300, or 40 per cent., made a complete and spontaneous recovery, and 700 more, or 20 per cent., made a partial recovery. The criterion of recovery adopted was complete restoration of function in every paralysed muscle, except the intrinsics of the foot in cases of sciatic nerve injury. These muscles have never been known to recover. The above figures indicate that many war injuries of nerves are due to the effects of concussion and contusion, and they have an important bearing on treatment.

NERVE REGENERATION

A long-continued controversy has raged regarding the relative importance of the proximal and distal stumps in the regeneration of a divided nerve; it is now recognised that both are important. The following changes occur :—

1. In the axons. The axons in the distal stump undergo Wallerian degeneration. Those in the proximal stump may show several changes; most of them branch. Branching ensures that some axons will reach end organs, but it also ensures that some confusion will occur. Some thicken and produce end-bulbs, while others end in glomerular tufts. In some animals, but not in man, the axons form spirals around themselves. Some axons, the lucky ones, enter the neurilemma tubes provided by the Schwann cells of the distal stump, and grow down them to reach end organs. Confusion results when axons enter the wrong neurilemma tubes, and it is of more significance in mixed than in pure nerves for obvious reasons.

2. In the Schwann cells. Great hyperplasia of the Schwann cells occurs in the distal stump, and to a lesser extent in the distal few millimetres of the proximal stump. This results in the formation of a multinucleated mass of protoplasm which gives rise to neurilemma tubes, into which the axons from the proximal stump grow. These neurilemma tubes are of great importance in the process of regeneration. The importance of the Schwann cells has been appreciated only recently since Bodian introduced his method of staining these cells together with the axons and the myelin on the same slide. The down-growth of axons cannot occur until the Schwann cells of the distal stump have provided them with Schwannic sheathes.

3. In the Myelin. Degeneration of the myelin occurs in the distal stump. The growing axons are at first unmyelinated, but gain a sheath after a few weeks. This may be a factor in the defective sensation of the early stages of recovery.

4. In the intraneural connective tissue. Hyperplasia of this occurs at the suture line, and, if excessive, will obstruct or deviate the down-growing axons. This will result in failure of recovery, or in confusion. Intraneural fibrosis is greatly increased by infection, hence the importance of the latter. Marked increase in intraneural fibrous tissue may also occur in the proximal stump, sometimes for a considerable distance.

After nerve suture the rate of axonal down-growth averages 2 or 3 millimetres per day. There is a latent interval during which the axons are crossing the suture line. According to Young and Medawar this latent interval is less after fibrin suture than after stitch suture. These workers found it averaged about eight days in the rabbit following fibrin suture of the sciatic nerve.

A knowledge of intraneural topography is important for a correct understanding of the process of regeneration. It is now established that each nerve is made up of complicated plexuses of fibrils, and that the pattern therefore changes rapidly from segment to segment. This makes accurate funicular apposition difficult after nerve division, and impossible after partial ablation. Because of this arrangement some degree of confusion due to straying of axons into wrong neurilemma tubes is almost unavoidable, and this accounts for the poor results of suture of mixed nerves such as the median or ulnar, as compared with those of pure nerves such as the facial, radial or trigeminal.

EFFECTS OF NERVE INJURIES

Peripheral nerve injuries may produce seven groups of results :—

1. Motor loss.—This is characterised by paralysis with wasting, loss of tone, loss of reflexes, fibrillation, and degeneration of the muscles. Loss of tone is best demonstrated by palpation. The fibrillation is delayed in onset and is extremely fine in character, because it involves individual muscle fibres. It is quite different to the fibrillation of progressive muscular atrophy. The latter is coarser, it involves groups of muscle fibres because the impulses are originated by anterior born cells.

2. Sensory loss involves all forms of sensation in cases of nerve division, but in compression pain is involved before touch.

3. Vasomotor effects are due to paralysis of fibres to the blood vessels, sweat glands and erectores pilorum. Coldness, blueness, œdema, absence of sweating, and desquamation of epithelium may result.

4. Trophic disturbances are probably due to a combination of vasomotor paralysis and anæsthesia and not to involvement of special trophic fibres. Such disturbances may result in pene-

trating ulcers, especially in the region of the heel in sciatic nerve injuries, burns, especially along the ulnar border of the hand in ulnar nerve lesions, and Charcot joints which occasionally occur in the foot and ankle after injuries to the sciatic nerve.

5. Loss of movement may result in adhesions, contractures and slow growth of the nails.

6. Effects of splint pressure. The blood vessels of the hand are very prone to damage by tight or ill-fitting splints, because they are not well protected by a covering of soft tissues. Splints in this region should be light and well-fitting.

7. Painful phenomena may take one of two forms, causalgia or phantom limb.

Causalgia is most commonly seen after partial division or compression of the median and sciatic nerves. The pain is spontaneous and of a peculiarly unpleasant character. It usually takes the form of an intense hot or burning sensation, which is present continuously, but which is aggravated by stimuli which, characteristically, have no relationship to the injured limb, such as a loud noise or a bright light. The anticipation of examination of the part may also exaggerate it. The mentality of the patient is often abnormal, and when the condition has been present for long it colours his whole outlook and dominates his life. He refuses to use the limb, which he guards like delicate china. This lack of use frequently leads to contractures and trophic changes are common. The skin is smooth and shiny, cold and blue. Sweating is profuse, indicating a partial nerve lesion; occasionally the skin is dry.

The condition usually persists for a few months and then passes off spontaneously. Occasionally it persists indefinitely in spite of all forms of treatment. In the early stages no treatment should be given, other than reassurance, in the hope that spontaneous recovery will occur. In the persistent stages alcohol injection, posterior rhizotomy, or section of the pain tracts in the spinal cord will probably give no relief.

Phantom limb is associated with pain similar to that of causalgia. The phantom limb is usually still, and in the position which the limb occupied at the time of the accident. This emphasises the importance of the psychological factor. A few patients say they can move their phantom limb. The condition usually resolves spontaneously in from twelve to eighteen months, and if not, no treatment is of any avail.

Sector News

Guy's Letter

THIS last fortnight has witnessed a constant trek to and from the air-raid shelters with an almost monotonous regularity. Contrary to wide-spread rumour, Guy's still stands with even its surgical block intact; in fact, outside of the distant rumble of gun-fire, we have not experienced any real warfare whatsoever.

Teaching rounds and clinical lectures, if anything, are on the increase and apart from an occasional pause at the sound of the sirens, they continue on uninterrupted. The only real inconvenience so far, has been the policy of clearing the College dining room at the first note of a warning; consequently there has been many an unfinished meal of late, and worse than that, there have been frequent occasions when the meal was never started.

The whole tendency of this sudden increase in air activity has been to establish a new communal spirit among those of us at Guy's. It is inspiring to watch the nurses curl upon their mattresses in the underground shelters, and students and others, adopt new and safer dormitories without even a grumble; instead, everyone has assumed these new sacrifices and inconveniences with a good wholesome enthusiasm.

B. L.

Pembury Letter

We write this letter from within the new Defence area, so that we are now cut off from the casual visitor. Except for that we have noticed little change in our mode of life.

Last week we received a visit from the Minister of Health, and we trust he was pleased with what he saw. Being unable to obtain the village band to welcome him we had to "make do" with the wail of the local siren. We had hoped to publish a photograph of the Minister firing at a Junkers 88 with an automatic sigmoidoscope, but factors beyond our control have prevented this.

After nearly a year in the country, twenty-one of our Guy's nurses have returned to the Borough. We understand that few of them welcomed the change. Down here they had to take the good with the bad, but we think there was a great deal more of good.

No doubt our contemporaries will relate their air-raid experiences and we too have not been neglected. Our "Bag" so far is an incendiary bomb, a square yard of armour plate and a mass of synthetic glass. We are glad to say this has all fallen harmlessly in the very ample hospital grounds.

N. M. J.

Farnborough Letter

THE invasion here by Guy's at the beginning of the war naturally overtaxed the Nurses' Home and, up to the present, many nurses have had to be billeted outside. Lately, however, an evacuated school in the neighbourhood has been taken over as additional sleeping quarters and should be in occupation shortly. We were given an opportunity of inspecting the house and grounds at a house-warming at which the Group Officer, Matron MacManus, and most of the Farnborough medical and nursing staffs were present. The luxurious surroundings include a swimming pool, which has already been put to good use.

A few days later another party was held there, to bid farewell to Sister Poyser. The success of the evening, which began with a spelling bee and ended with a game of murder, was only marred by the thought that it marked the loss to Guy's of a Sister who will be greatly missed by all who had the good fortune to work with her. We wish her all good luck at Sedburgh.

Recent aerial activity and the results thereby have shaken us to our foundations; but, as yet' our only internal casualty has been a variety concert of local talent. This had started with great promise when it was rudely interrupted by the sirens, and, after half-an-hour of impromptu entertainment, it was decided that the hall had to be cleared. It is hoped, however, to put on the show again in the hope of better luck next time.

G. L. L. R.

Orpington Letter

A FORTNIGHT ago we were rash enough to state that no distinguishing marks of enemy action marred our precincts. Since then we have been christened, and are now able to boast three moderate-sized battle scars. Not a single casualty was sustained, for which we can be profoundly grateful, and real damage was confined to one boiler in the boiler-house. Of the other two bombs, one demolished a very old shed which, ironically enough, was used to store wood and pipes for use in repairing air-raid damage, while the other fell on the lawn in front of the Nurses' Home and luckily failed to explode. A small fire was rapidly extinguished by the Fire Squad, ably assisted by the House Officers.

On Saturday, August 24th, we were visited by the Minister of Health, who made a very extensive tour of the whole hospital and demanded first-hand information from all quarters. We were all very grateful for the keen interest which he took in everything he saw, and we hope that as a result of his visit a number of improvements will be made.

Entertainment during the past fornight has been limited to one cinema show and a very successful E.N.S.A. concert headed by Foster Richardson.

A. T. M. R.

Joyce Green Letter

LAST week commenced in great style with a dance arranged by our Military Registrar in aid of the Red Cross, at a local hall in Dartford. This was most ably supported by both nurses and staff. Some trepidation was felt at the commencement because one had visions of some discourteous Nazi airman rudely interrupting the function, and there are more pleasant places to sit out one's dances than an air-raid shelter. Fortunately fate was kind, the sirens left the "wailing" to the saxophones, and the evening was a great success, both financial and social.

Miss Diana Wynyard recently visited us with a concert party which toured the army wards. The show went down very well with the patients, most

of whom were beginning to get rather tired of doing jig-saw puzzles. Apart from a large number of spikes of temperature that evening, their general condition seemed to be improved. We find it very difficult to discover means of helping normally active men to pass away their time, especially when they are congregated together and boredom o infectious. Fortunately we possess several very active social workers who not only supply them with literature and games, but occasionally arrange for the more convalescent members to visit a show in town. In spite of all efforts however, the men find convalescence a tedious business and even the air-raid alarms are regarded as no more tiian an additional irritation in a somewhat trying routine. A. M. H.

Correspondence

The Young Surgeon after the War

To the Editor of the GAZETTE

SIR,—Having recently read the " Citadel " my first reaction upon reading Mr. Whiddon's article in the *Gazette* of August 24th, was one of amusement, for it is obviously a clever addition to Dr. Cronin's book. On reading the article again, however, I wondered whether some for whom it is intended might not take Mr. Whiddon seriously, and felt that some comments should be made upon his statements.

In the first place, of course, very few people will be able to make £20,000 a year five years after this war, and if Taxes remain even as they are, probably few of us will want to. But it is not financially that I wish to criticise, for it is delightful to see how the young surgeon's income goes up by leaps and bounds. How one would like to be invited to one of the parties in the 5th year!

In his remarks upon advertising Mr. Whiddon states that 'the gateway to the practitioners home, is to write books, which can be advertised week after week in the journals.' Personally, I would never choose a surgeon for one of my patients merely because he happened to write books, even even if I had time to read them. Most of us require something more in a specialist. A man you can trust is the first essential, not a man who would pass on to his first assistant a case which was likely to do badly. Not a man who is interested only in the diseases of the rich, and certainly not a man who performs 'bizarre and unorthodox operations.'

General practitioners are on the whole a critical class, and it might interest Mr. Whiddon to know that we are not all attracted by window-dressing. Many of us even suspect the gold-knobbed cane and the too new Rolls Royce.

All credit to Mr. Whiddon for pointing out the snag in his own scheme, which I have endeavoured to enlarge upon. Perhaps if he is not too busy one of his secretaries might obtain for him a copy of Professor Ryle's book (written curiously enough by Professor Ryle himself), in which, speaking of the Hippocratic Ideal he says: ". . . Cloaked advertisement, stunt treatment, and commercial methods have crept in insidiously in some quarters. These evils are not new, but if there be any truth in the impression that they are increasing it is time that a profession, which has hitherto maintained its standards at a very high level, should immediately seek to set its house in order."

Yours, etc.,
D. W. JAMES,

Hitchin,
Herts.

To the Editor of the GAZETTE

SIR,—I thoroughly enjoyed Mr. Whiddon's article in the *Gazette*.

Mr. Whiddon does not, however, mention one of the duties of the young surgeon's secretary, which surely deserves comment, namely, her ability to save the young surgeon from the demands of the Income Tax Collector. Surely such ability deserves a higher salary!

Perhaps however, after the war, there will be no Income Tax—Hitler will pay for it all.

Let my home address be the excuse for my letter.

Yours, etc,
F. DOUGLAS TURNER,

The Royal Eastern Counties Institution Ltd.,
Colchester.

Sir Astley Cooper's Lectures on Anatomy

To the Editor of the GAZETTE

SIR,—Now that papers are being turned out may I ask any Guy's man with a medical ancestry to keep an eye open for a manuscript copy of Sir Astley Cooper's lectures upon Anatomy. There are several extant of his lectures on Surgery, but of those on Anatomy I know only of those taken by John Keats. To have another, with which to compare these, would

provide a valuable bit of evidence in the study of his life as a medical student. If anyone comes across such a manuscript we should be pleased to accept it as a gift for our library here, unless Dr. Campbell claims that it ought to be at Guy's.

Yours, etc.

T. B. LAYTON.

Society of Apothecaries of London,
Blackfriars Lane,
Queen Victoria Street,
London, E.C.4

Starlings Review

To the Editor of the GAZETTE

SIR,—I notice with regret that Mr. Johnson has found it necessary to write to you about the last Starlings Review. By so doing he has drawn attention to a most unfortunate event, and in the process has made quite sure that those of us who were not at at the Concert have had to hear what was said there.

It might also be in his own interest to look up the meaning of the term "pornographic" in his dictionary.

I would like to apologise to those who were present at this Concert. I have tried in the past to maintain a certain level—not a very high one—but on this occasion I had left the Concert in the hands of two of the oldest members of the Starlings Review. They appear to have found their own level with some rapidity.

I can assure my audience—if it still exists—that this will not occur again.

Yours, etc.,

T. H. HILLS,

Guy's Hospital,
S.E. 1

"America Revisited"

By W. H. Ogilvie, Esq., M.Ch.

(*continued*)

At Boston I was met by Allen's chauffeur, and taken up to the house, where Magdalen had arrived half an hour before from New York. She had been fortunate to find Beattie on the boat. I hurried down to the Phillip House (Nuffield House of the M.G.H.) to find Allen doing a hysterectomy for fibroids. He had cauterised the cervix per vaginam first. Very nice work. Sewed the stumps of the round ligaments in the vaginal vault, and peritonealised with a small atraumatic needle—a far better job than a gynæcologist with a Reverdin.

The second case was a difficult gall bladder, a low-grade empyema first emptied with suction trocar. He worked from fundus down, and dissected a wide collar of a good half inch on each side; near Hartman's pouch the gall bladder burst, but, keeping inside the collar, he got pouch and cystic duct out. The result was a perfectly peritonealised bed. I was impressed; starting at the cystic duct I am pretty sure the gall bladder would have peeled out of the liver, leaving no peritoneal cuff to cover the raw area. The third case was hæmorrhoids. Spinal anæsthetic; he then injected Eucupin round, with finger inside as a guide, about 15 c.c. in all. Excision and suture of three key piles. Has a separate $\frac{3}{4}$-inch retractor on the two piles not being done, or their beds. Finished by cutting back in mid-line behind through external sphincter and pecten band, and sewing mucus membrane transversely.

In the evening Allen took me to his Lodge, the St. Andrew's. I had to pass an examination committee of three, but, though their ceremony is entirely different, I satisfied them with my knowledge of masonic princples. Ceremony intensely interesting, dinner cheery and speeches many.

Friday, October 14th

Allen was operating on a carcinoma coli at 8.30. He had previously done his cæcostomy, which is a wide one, not however an exclusion. He resected by an aseptic method of his own with a "basting stitch" (Fig. 4).

(1) Crushes at two points with Peyr, takes bowel with a fine-bladed Ochsner of his own (a Schoemaker would be better) and sears off flush with cautery.

(2) Puts a continuous Halsted over the Ochsner, the basting stitch (*a*). This is of tough catgut, and must be clamped with different forceps to the anastomosing suture (in this case Ochsners as against hæmostats).

(3) Brings ends of gut together and does posterior row of lemberts, knotted at each end.

(4) Takes off clamp, while assistant pulls Ochsner at one end of basting stitch and he the other. This inverts the cut and seared end of gut (*b*).

(5) Does anterior part of lembert.

(6) Tidies up anastomosis with other stitches.

(7) Pulls out basting stitch.
(8) Puts finger through wall to break down septum.
(9) Closes hole in mesentery.
He closes abdominal wall with catgut, puts a lot of silkworm stitches from skin through rectus sheath, sews skin with blanket stitch of fine silk, and ties the silkworm over a dressing, says this abolishes all dead space, leaves stitches two weeks, in cancer cases 18 to 21 days.

Hospital Information, etc.

Notice

THE SOCIETY OF APOTHECARIES

The Society of Apothecaries' Examinations are as follows :—

Biology : Oct. 7.
Anatomy, Physiology and Materia Medica : Oct. 7.
Pharmacology : Oct. 7.
Surgery : Oct. 14, 16, 17.
Medicine, Pathology and Forensic Medicine : Oct. 21, 23, 24.
Midwifery : Oct. 22, 23, 24, 25.

Pass List

SOCIETY OF APOTHECARIES OF LONDON. FINAL EXAMINATION

July, 1940

Surgery

*R. M. J. Franks

*Has completed the examination.

August, 1940

Surgery

N. A. St. C. Marley

Medicine

*E. F. Gleadow — A. L. H. Smith

Forensic Medicine

*E. F. Gleadow — A. L. H. Smith

Midwifery

E. W. Crews — D. W. Mayman

* Has completed the examination.

UNIVERSITY OF LONDON THIRD (B.D.S.) EXAMINATION IN DENTAL SURGERY

July, 1940

Honours

(*a*) D. P. Finnegan

(*a*) Awarded a mark of distinction in Medicine.

Pass

H. A. Hall — M. C. Scargill
R. E. Matthews — P. H. Staple

SUPPLEMENTARY PASS LIST

The following Student has passed in Group I.

N. M. Midgley

SECOND EXAMINATION IN DENTAL SURGERY

PART II.

July, 1940

A. E. Cadman — D. G. E. Roberts
W. J. Ford — A. Ross
T. J. Hancock — *N. Stark
E. Horne

* Awarded a mark of distinction.

SECOND EXAMINATION IN DENTAL SURGERY

PART I

July, 1940

T. D. Birtwhistle — H. C. Miller
R. D. Emslie — T. A. Morris
J. R. Halden — D. H. Norman
A. V. Hurst — H. W. Palowkar
J. H. H. Knight — B. W. Pett
R. C. Lawrence — M. C. Rosen
H. C. Martin — E. C. Stuart

The following Student is credited with Prosthetic Dentistry including Metallurgy

R. J. Hunter

The following Students are credited with Anatomy and Physiology

J. C. Cox — J. A. Ireland
E. A. Glover — B. N. Joyce
A. J. Goodwright — A. D. Robinson
P. C. Grummitt

Papers by Guy's Men

Fry, W. Kelsey. Gunshot wounds of the jaws. *Brit. Dent. J.*, 1940, **69**, 88.

Hurst, Sir Arthur. Poaching. *Clin. J.*, 1940, **69**, 197.

Grace, W. H., and Others. Suprarenal hæmorrhage in meningococcal septicæmia : Waterhouse-Friderichsen syndrome. *Lancet*, 1940, *ii*, 102.

Currie, J. A. A case of megalo-ureter. *Proc. Roy. Soc. Med.*, 1940, **33**, 587.

Dowling, G. B. Erythroderma with deep pigmentation. *Ibid.*, 585.

Handley, W. Sampson. Excision of the body of the pancreas. *Brit. J. Surg.*, 1940, **28**, 143.

Leibel, Bernard. Peripheral circulation by photo-electric recording. *British Heart J.*, 1940, **2**, 141.

De Navasquez, S., Forbes, J. R., and Holling, H. E. Right ventricular hypertrophy of unknown origin : So-called pulmonary hypertension. *Ibid.*, 177.

Changes of Address

P. W. Clarkson, Major R.A.M.C., c/o Army Post Office.

A. G. Johnson, Major R.A.M.C., Barclay's Bank, Paddington Station Branch, W.2.

F. R. Wallis, L.D.S., R.C.S., 49, Bath Street, Leamington Spa.

Birth

CUTLER—On September 1st, 1940, to Peggy, wife of E. P. Cutler, Lieut. Army Dental Corps—a daughter.

Marriage

DAVIES—BARBER.—On July 20th, 1940, at Singapore, Major L. E. Charles Davies, R.A.M.C., son of Dr. and Mrs. Walter Davies, of Llanidloes, to Sybil, eldest daughter of Dr. Hugh Barber and the late Mrs. Barber, of Derby.

EDS. { N.A.N. B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

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Volume LIV 21*st September* 1940 *Number* 1361

PASSIM

GUY'S has now been subjected to the effects of real modern warfare. The enemy has seen fit to indulge in indiscriminate bombing raids over the London area, and as a result we have received our share of casualties. On Saturday, September 7th, in the late afternoon, a series of fires were started following an intensive air raid; using these fires as beacons, the raiders returned throughout the night to attack their military objectives or anything else in the very approximate neighbourhood.

From the start of this offensive, a steady stream of casualties began to arrive at the Memorial Gates of Guy's Hospital. What we had organised and prepared for in the previous months had suddenly come to pass. Almost all of the patients were suffering from shock, a shock that was not only traumatic but also mental, for not a few of them had seen their relatives and friends fall victims to this German wretchedness.

Both medical and surgical staffs worked in complete harmony under the constant supervision of our Deputy Superintendent. The immediate problem in the majority of cases was the adequate administration of resuscitation. The architectural deficiencies of our buildings were easily overcome by the stable co-operation of the stretcher-bearers, who worked ceaselessly and without complaint. This is not the time for a description of cases and a weighing of results, but one cannot help remarking on the almost dramatic recovery of seemingly lifeless casualties after a vigorous regime of resuscitation had been instituted. Many of these patients who had suffered a multiplicity of perforating wounds of chest and abdomen together with head injuries and burns were removed to the operating theatre within a few hours of admission; there, our surgeons operated upon them, applying their tireless skill without effort and with admirable patience until their job was finished.

To avoid congestion of the wards by the accumulation of patients, a system of evacuation to base hospitals was started at once. Just as soon as emergency treatment had been applied and the patient had sufficiently recovered, he was comfortably accommodated in a stretcher bus, appropriate care being taken of the respective injuries of each patient so that he or she did not suffer by transport. In spite of many of these operations taking place at night under constant exposure to bombs and shrapnel, there is not a single report of any patient having suffered adversely from the journey.

The performance of students and nurses throughout the entire procedure has been one of merit and a tribute to themselves and Guy's Hospital. There was not the slightest suggestion of hysteria or fright among any of them, but, instead, each worked with a cool efficiency, applying his own intelligence to what had to be done instead of stupidly standing about waiting for orders and "blocking the work" in the meantime. When there was work to be done, there was always an abundance of available personnel ready on the spot; in the intervals between action, instead of wasting time on jittery idle chatter, each person sought out a safe underground room and curled up in a well-deserved quiet sleep.

Many months ago the student body was released from the Emergency Medical Service. At the time there was a good deal of speculation as to the reaction of the students, especially with regard to what might be expected of them when their services were really required. That question has now been answered; without thought to their personal safety, without bitterness or even a grumble, sleepless and fatiqued as they were, they piled into each new task with a vigour that did them credit. Now that the initial excitement has passed, the time has come for the organisation of

a routine " on- and off-duty " rota. This system will necessarily entail additional living expenses to a number of students whose families are already suffering from some financial distress. In view of the splendid and necessary work they do, it is to be hoped that at least those students so affected will receive sufficient assistance to allow them to carry on unembarrassed.

Right from the day he walked into Austria without firing a gun, even before that, Herr Hitler has always scored his successes by a moral victory. But the British Commonwealth are made of different stuff than our continental friends; every bomb that he drops, every church that he destroys, every home and person that he shatters—yes, even a bomb in the heart of our own Hospital—only strengthens our resolve to win through in the end. It is a struggle of British ingenuity and perfection against Nazi productiveness; when we see fit to change the style of battle, the war will be won.

WE are informed that a sum of money from a private source is available for replacing the kit of Guy's nurses who lost their equipment in the evacuation from France and Belgium; Matron would be glad to hear from any nurse who lost her kit in this way.

War Injuries of the Chest

A Clinical Lecture delivered at Guy's Hospital on Wednesday. 10th July, 1940, by R. C. Brock, Esq., M.S., F.R.C.S.

GENTLEMEN,—Before discussing war injuries to the chest I wish to refer to two things of general importance in dealing with war casualties. The first is the taking of notes from the very beginning. If you have only a few wounded to deal with there can be no excuse for omitting to make notes on the ground of lack of time. If the number of casualties is large, then it is even more important to write down notes, however brief, of the time, place and mode of wounding and of the clinical condition, provisional diagnosis and recommendations for treatment. With large numbers of wounded an atmosphere of tension and some confusion is liable to develop; quiet, even though rapid, note-taking will exercise a very steadying influence on all personnel. In addition, you will find that the few moments taken to write down your findings will save you and others much time and energy later on. After you have examined say a dozen wounded, you will find that it is difficult or impossible to remember details of the earlier cases. Even a few notes, *with your conclusions,* will recall the whole picture in a flash. Reference to your notes will save others duplication or triplication of effort and will spare the patient much unnecessary disturbance by further questioning and examining. I have been astonished how often, when called in to see casualties, not only are no notes available about the patient's condition and operation performed, but that often in the absence of the surgeon concerned nobody has any more than the flimsiest idea of what has been done.

The second thing is the use of radiography. While not advocating the prodigal use of X-ray photographs I think that a great mistake has been made by those who have belittled the use of radiography in war casualty work. You will see it stated that it is an unnecessary procedure and that time should not be wasted on it. This may often be true, but I consider it is often either ignorance or negligence to omit it. In chest wounds it is almost indispensable at all times, although it can be delayed in cases of injury by small fragments in which the general condition of the patient appears satisfactory. In dealing with severe injuries, even in the presence of a rush of work, radiography should never be omitted if it is available. There will be occasions on which it is not possible to X-ray the wounded, but when facilities are available it is wrong not to use them, and I cannot understand the mental attitude of the man who refuses to do so. In many of my most difficult, anxious and desperate cases the whole picture has been clarified at once by radiographs, and this has been especially so in thoraco-abdominal wounds. I would go so far as to say that it is but rarely possible to give an assured and proper opinion in these grave injuries without radiography, and if space were available I could quote numerous examples to prove this.

My remarks on the treatment of chest wounds are based on three sets of experiences. The first is the ordinary routine of thoracic surgery in peace-time coupled with a sprinkling of civilian injuries to the chest. Remember that the chest

surgeon in effect causes perforating chest wounds with the same risk of hæmorrhage into the chest, and the principles of treatment learned in peace-time are of great value in war-time as well. The second is my experience of war pensioners. For the last five or six years while attached as consultant to the Ministry of Pensions I have seen many cases of wounds of the chest dating from the last war, and therefore have had the opportunity of studying the end-results or the late prognosis, and this, you will appreciate, is of great importance. One of the disadvantages of seeing patients for only a few days in a casualty clearing station, or a few weeks in a base hospital, is that you cannot know what happens to the patient in ten, fifteen or twenty years' time. I shall refer later to the lessons learnt from a study of these war pensioners. Thirdly, in the present war, although casualties have arrived only recently, there has been no dearth of chest wounds of all grades of severity. I have now seen nearly two hundred in the unit to which I am attached and in the hospitals to which I have been called.

The subject of chest injuries is a big one, as can be seen by the fact that recently a whole week was devoted to it at the Post-Graduate Medical School, Hammersmith, and I shall be able to touch only briefly on what I consider the more important types.

I.—CRUSH INJURIES

The first group is that of crush injuries, and these occur from falling masonry, the blast of explosions, and in road collisions. Many are in the nature of bursting wounds caused by pressure on the front or side of the chest which reacts like a bursting paper bag; the ribs from top to bottom may be cracked or broken on one or both sides. Traumatic asphyxia may occur and is often rapidly fatal; in others, varying degrees of surgical emphysema are seen.

The patients are usually very ill from shock, and hæmothorax may be present on one or both sides. Tension pneumothorax may develop and treatment must then be prompt. Resuscitation is needed to combat shock and the chest must be stabilised by firm strapping. In some the chest is merely a bag of bones and the immediate beneficial effect of firm strapping is dramatic. In addition, these patients require oxygen and this should be ready. I have found the high percentage administrations afforded by the Mayo or B.L.B. mask (recently described by Dr. Mutch in an admirable article in the *Guy's Gazette*) absolutely life-saving. It should certainly be used in addition to morphia, blood-transfusion and heat in *all* cases of severe shock. After the dangers of the first period have been passed, these patients are liable to develop bronchial retention owing to the pain and difficulty of clearing their lungs by coughing. Unless expectoration is aided by proper posture and encouragement death may follow from broncho-pneumonia.

II.—SMALL PENETRATING WOUNDS WITHOUT HÆMOTHORAX

The next group is of cases with a small entrance wound or a "through and through" wound with or without a retained foreign body and without a hæmothorax or pneumothorax of any considerable size. Conservative treatment gives excellent results, and in most it is not even necessary to excise the wound, which heals readily under an antiseptic dressing. I would remind you of the advice recently given by Dr. Ryle of how important it is to reassure the patient that his chest wound is not going to be fatal, for in the lay mind a chest wound is always taken to be serious, whereas many get quite well when left alone.

Later on I shall discuss the ultimate prognosis in regard to the small retained foreign body, but so far as immediate treatment is concerned it should be left.

III.—SMALL PENETRATING WOUNDS WITH HÆMOTHORAX

The third group is of a similar type, that is a small entry wound but with a hæmothorax of considerable size. The problem of hæmothorax is a difficult one, and I do not pretend to say that I am satisfied with our state of knowledge about its treatment. We have still much to learn before forming final conclusions, but at present the problem seems to resolve into two main considerations :—

(i) The question of the blood in the chest;
(ii) The question of infection.

(i) *The question of the blood.*—In general it is satisfactory to remove it by aspiration within the first 24 hours and sufficient air should be replaced to exercise a compressive effect upon the lung in case bleeding should be coming from it. Many people, however, would leave aspiration for a few days provided the patient is not distressed by secondary pressure effects from the quantity of blood. The danger of this procedure is that progressive bleeding may occur unnoticed, whereas with early air replacement any further accumulation of blood would be readily detected. Once bleeding has apparently stopped air replacement should not be practised as one of the objects of aspiration is to encourage the lung to expand and obliterate the space.

Actually, although treatment by aspiration sounds easy, in practice it is often found to be difficult or impossible owing to the presence of clot. In some patients huge masses of sponge-like clot fill half the chest, and although in a proportion of these liquefaction may occur and render satisfactory aspiration possible, in many it is far more difficult. If left for long, such a hæmothorax causes great deformity and permanent disability by extensive and severe pleural fibrosis. I have seen many late results of this among war pensioners who, after a number of years, complain of dyspnœa and inability to perform hard work. In some the dense pleural fibrosis may be associated with large calcified or even osseous plaques. This serious and permanent disability should be avoided at all costs by early treatment, and I feel that in those cases of severe hæmothorax with retained clot in which aspiration fails it is justifiable to open the chest and evacuate the fluid blood and clot completely so that the lung is allowed to expand; breathing and remedial exercises should then be instituted.

(ii) *The question of infection.*—A hæmothorax may remain sterile for as long as one to three weeks, the patient being apparently quite well, and then a severe and even fatal infection may develop. I should like you to appreciate that, unless you are able to observe your cases for long enough, you will not recognise this event. The apparently benign course of the case watched for a short time in a casualty clearing station may be totally altered when he reaches a base or home hospital. Not a few of these develop a severe anærobic infection. The process is easy to understand. The entry wound in the lung sloughs, and, of course, infection spreads to the hæmothorax.

The recognition of the onset of infection in a hæmothorax is of great importance because it is a serious complication, often fatal, and must be dealt with promptly. A hæmothorax case needs daily watching, and aspiration at least every other day. It is not enough to send aspirated material down to the laboratory; the fluid blood in the chest is the best culture medium possible and positive information can and should be obtained at once. Infected blood becomes laked and assumes a purplish colour and may smell offensive. A direct smear should be made and examined at once, and if micro-organisms are seen it means that infection has occurred. Further culture will only confirm the immediate findings.

As in all other diffuse infections of the pleural cavity, it is better, if possible, to practise repeated aspiration until a localised abscess has formed and can be drained efficiently by rib-resection. In many, however, one's hand is forced earlier by the grave condition of the patient and the impossibility of effective aspiration of the infected clot. An intercostal catheter should then be inserted and connected to an underwater drain. Again daily watch should be made for the development of cellulitis of the chest wall, which may progress to form a huge phlegmon and may tip the balance against recovery if not promptly and efficiently dealt with.

IV.—OPEN WOUNDS OF THE PLEURA

Open wounds of the pleura will obviously be of various sizes from, say, that of a finger-tip up to four inches by two inches. You will see few of the larger ones as most of the patients with these will die on the spot or soon after. In addition to the size of the wound, which may itself kill the patient, the seriousness has to be correlated with the size of the fragment causing the injury. It should be remembered that, in general, if a man is hit by a large fragment of metal he is very much worse off than if hit by a small fragment, and, in fact, injury by a very large fragment is almost always fatal, particularly if it causes a thoracic or abdominal wound. In selecting cases for operation these patients with wounds from very big fragments should be put aside until cases more likely to benefit by operation have been dealt with. When the injury is caused by a tangential blow from a shell or bomb fragment a large defect may result, even though the missile itself is not large; in some cases a portion of the chest wall is virtually blown away.

These open wounds of the pleura form a complex group, and my experience of them has coloured my whole impression of the seriousness of war wounds of the chest. One might gather from many accounts that by treating patients with war wounds of the chest conservatively a large number of them get well. The surgeons in the South African War said: "We did not worry about chest wounds in the South African War; we just did nothing to them and they got well." I have no doubt that this was in great part true, but although the same principle was applied to most chest wounds in the Great War, with success in certain benign groups, there is no doubt that the mortality in general was high, and I am sure that with the present incidence of injury by high-velocity fragments of bomb and shell such a purely negative policy is wrong, and in fact is being followed by a high mortality. My own impression of the war wounds of the chest up to now has been that they are grave. I have never seen such a large collection of really ill people as I have had in my wards since the Dunkirk evacua-

tion caused the return of chest casualties to this country. Of course, the worse cases tend to be sent to the surgeon and the milder chest wounds are kept or looked after by a physician, and this is perhaps why a rather rosier picture is often painted by those who write of the success of non-surgical treatment in general. I want you to appreciate that a patient with an open wound of the pleura will certainly need surgical treatment at some time or other, and one cannot accept the statement that he will be satisfactorily treated by non-surgical methods.

I have already mentioned the need for putting aside the very bad cases with big wounds for anything more than first-aid work until the more promising cases have been dealt with. The problems that face one become increasingly difficult and complicated with the greater size of the wound. There are briefly three considerations which we have to bear in mind in dealing with these open wounds of the pleura, excluding, of course, such primary considerations as the relief of shock and the giving of sera and chemo-therapeutic preparations to prevent infection. They are :—

(i) Excision of the wound and its closure ;
(ii) Drainage of the pleura ;
(iii) The question of removal of foreign bodies.

(i) *The excision of the wound.*—Earlier in this lecture I mentioned that excision of small entry and exit wounds is often not necessary, and may be impossible owing to circumstances. Even in larger wounds it may not be possible or desirable to excise the wound because the patient is too ill or circumstances do not allow it. In general, wounds of the chest wall should be treated on the same principles that govern the treatment of wounds elsewhere in the body. One should practise careful excision, removing all contused and damaged tissues, skin, muscle and fragmented ribs. Excision is often faulty, and I have re-operated on many wounds which were supposed to have been excised and have picked out fragments of entirely loose and dirty bone both from the chest wall and from the pleura and lung.

Excision and primary suture of the wound should be performed if the case is received within a few hours, in general not more than from four to six hours—sometimes up to twelve hours. In air-raid casualties which are seen within a short time of the wound being inflicted, excision and suture is usually possible, but in the war casualties received from France in May and June primary suture was not possible ; we saw a number in which it had been done and it was followed by disastrous results.

I am sure that one of the reasons for many chest wounds being sewn up when they should not have been is the current teaching on the treatment of an open wound of the pleura. It is stated that one of the real emergencies in casualty surgery is the open and sucking wound of the chest, and that it must at all costs be closed. That is quite right, it must be *closed*—the emphasis is on the word " closed," but it should not necessarily be *sutured.* Closure of the wound relieves shock, prevents the entry of infected material, and may stop collapse of the lung. The patient can, in fact, be snatched from certain death. I want you to appreciate that while the wound must be closed, this can be done as a first-aid step by means of almost anything. It is better to apply a (surgically) unclean handkerchief, if possible soaked in some antiseptic, than waste time until a proper dressing is available, and which should, of course, be applied later. The wound being closed it must be kept closed, and the simplest thing is strapping firmly applied over the pad which fills the wound. The strips of strapping should be nine to twelve inches long and be laid on crossing one another so that they are arranged like the spokes of a wheel. In this way the wound will be firmly and effectively closed so as to stand the strain of transport. Although the wound is closed, it is still open surgically, and it is wrong to sew it up unless it has been properly excised and the excision carried out soon after the injury.

In treating a patient with a large wound, say in the thigh, in which much tissue has been blown away and the muscles badly lacerated, no surgeon in his senses would excise the wound and sew it up tight ; he would leave it open. Yet I have seen many wounds of the chest wall of exactly the same type treated by excision and tight suture owing to the mistaken idea that they must be closed by suture at all costs. While it is desirable to suture the wound in many cases, it is most dangerous in others. Infection is covered up and the most calamitous results follow. Severe spreading cellulitis of the chest wall may occur, often with an anærobic infection inside the chest. I stress once more that the wound must be *closed* but *not sewn up*, unless, of course, the case is received very soon after the infliction of the injury and one is able to look after it oneself for at least a week. It is perfectly satisfactory for a skilled surgeon to excise and sew the wound up if he can himself watch it afterwards, but if he has to let it go out of his hands then the wound should be packed open and the dressing covered with firm strapping, just as should be done with every wound of the same type received too late for primary suture.

I cannot stress too much the dire results I have seen following the sewing up of these severe wounds

of the chest. Recently I was shown a man lying on a stretcher in the corner of a resuscitation ward where he had been for forty-eight hours in a moribund condition. He had an entry wound in the front and an open sucking wound at the back of the chest. I was told apologetically that, owing to his desperate state, the wound at the back had been packed and not stitched, and I was asked if I thought he was now fit enough to be given an anæsthetic for its suture. When I turned him over I found that the wound was not only infected but it literally stank. On further examination I found he had a large hæmothorax infected by anærobes, and also a retained bullet. If he had not been too ill on admission to have an anæsthetic his chest wound would have been sewn up tight and he would have had a severe spreading cellulitis of the chest wall in addition to his infected hæmothorax, and I am sure this would have killed him. As it is he has made a good recovery following drainage of the pleura and healing of the open wound by granulation.

Although open lacerated wounds received too late for primary suture should be treated initially by being packed and strapped, once the danger of spreading infection has passed, which may be in a few days, then they may, and in fact should, be closed by secondary suture.

(ii) *Drainage of the pleura.*—This is a most important subject, and in itself is worth a whole lecture, but I must necessarily be rather brief in my remarks about it. First of all it is interesting to speculate how much infection the pleura can deal with by itself, and I am coming to the conclusion that it can deal with quite a lot. This is not surprising when we remember its close developmental connection with the peritoneum, which we know is very resistant.

In considering whether to drain the peritoneum I apply two tests which are quite well known: (1) Is a condition present which the peritoneum obviously cannot deal with by itself? (2) Is it anticipated that a condition will be present which the peritoneum will be unable to deal with by itself? I think it probable that the same two tests might be used in deciding the question of pleural drainage. I am sure that the pleura can deal with some infection if the lung underneath is healthy and there is no fistula, if no foreign body is present, and if there is not an infected chest-wall wound. On the other hand it is difficult to lay down specific rules about drainage of the pleura. It is often safe not to drain, but without experience a bad mistake may be made by not doing so. In general, drainage should be used in every case of open wound of the pleura. With a small wound which has been excised early and sutured or has been packed open, one may succeed without draining, provided one is able to watch the patient carefully for about seven to ten days and provided any accompanying hæmothorax is aspirated. It is, however, taking a risk which is certainly not justified with a wound of any size or, of course, more than a few hours' duration. An intercostal drainage tube connected to an underwater seal and left in for forty-eight hours can do no harm and may avert a disaster. Although in some cases the drainage may be unnecessary, many more will be saved by it.

When infection is definitely present drainage of the pleura must be maintained until such time as one can no longer demonstrate that a cavity exists in the pleura. The drainage tube must be kept in until the lung is completely expanded in order to avoid the danger of a chronic empyema.

I cannot mention drainage of the pleura without referring to breathing and remedial exercises to promote the expansion of the lung and restore proper chest posture and movement. I think the recognition of the importance of breathing and remedial exercises and their application to the treatment of diseases of the chest is one of the greatest advances in their treatment which has taken place during the last ten years. Its influence on both immediate and late prognosis is considerable.

Once the patient with an infected pleura has passed the stage at which his life is in peril, care and strict attention must not be relaxed. As the weeks pass by, increasingly close observation is needed of the size and disposition of the drainage tube and of the restoration of proper chest movement. If this is not done many patients will finish with a chronic empyema and a flattened, deformed and permanently impaired chest. Apart from the loss to the nation of a fit man who might have returned to the fighting forces, there is the individual tragedy of a lifetime of impaired efficiency or semi-invalidism. The ultimate economic loss to the country may also be great, because such men are often a permanent charge on the community.

(iii) *The removal of foreign bodies.*—It is always pleasant to take out a foreign body, but it must be realised that in many cases it is not necessary to do so. I suppose that there are literally hundreds of thousands of men walking about the world with pieces of metal in their bodies as a result of the last war. Many do not even know that they carry them, and this is no less true of the chest than any other part of the body.

The immediate removal of a retained missile from the chest is obviously desirable if it can be made part of the primary operation, for there is

already a track leading down to it. At the same time I do not think one should extend the operation unduly in order to remove the foreign body if it is likely to imperil the patient's life. In many it would be sheer folly to search for a small fragment of metal which would in any case do no harm if left, and is probably unfindable; attention should be concentrated solely upon the wound itself, and the foreign body ignored. When the missile is not small and particularly when it is associated with a hæmothorax and a wound of the lung the correct thing is to aim at primary removal. In the last war prompt, bold surgical treatment was practised by only a few surgeons, and already in this war we are realising how rarely the patient is being given the opportunities of benefiting from modern thoracic surgery. So much of the work that has come to the unit in which I work has been due to late sepsis from perforating chest wounds with retained foreign bodies which have never been submitted to a radical primary operation. "There is a tide in the affairs of man that taken at the flood leads on to fortune," and nowhere is this more true than in many of the severe penetrating wounds of the chest. Delay so often means death, or prolonged sepsis, permanent disability of greater or lesser degree, and great economic loss to both the individual and the State. Prompt, bold operation in competent hands is followed by rapid and complete restoration of health in a high proportion of cases. We have been able to prove this time and time again whenever we have had cases early enough to justify this procedure. With the air-raids of recent weeks this experience has been further corroborated. A patient even on the point of death, can be successfully operated on after proper resuscitation, the wound excised, foreign body removed, hæmothorax evacuated and even partial or complete lobectomy performed and yet be fit and well in three weeks. In contrast are the long weeks or months of misery open to the patient who has been allowed to develop sepsis with a chest wall defect, a partly or totally collapsed lung, and a retained foreign body.

Unfortunately very few physicians and surgeons have as yet been convinced of this, and in many circles the bold attack of the modern chest surgeon is looked upon with doubt. I suppose it is up to us to convince you all of the safety of our methods and of their superiority over the strictly conservative methods which were employed by most in the last war.

The next question is that of delayed removal of a foreign body. There may have been many reasons why primary removal was not done; the patient may have been too ill at the time, or it may not have been possible to localise the foreign body properly or to use X-rays or circumstances did not permit of operation. It is convenient to consider two groups: (i) those cases without infection; (ii) those in which suppuration is present.

(i) *Retained missile apparently not infected.*—When the fragment is small, and particularly if it is deeply placed and giving rise to no symptoms, it should be left. Most patients will have no symptoms at all, but some do come back with symptoms in later years, *e.g.*, recurrent hæmoptysis, a chronic cough due to surrounding bronchiectasis, or sharp attacks of pneumonia.

The larger the fragment the more need there is for its removal, providing it is not so near the hilum that the risk of damage to the great vessels is a greater menace. The larger the foreign body the more likely is the patient to return in later years with symptoms such as bronchiectasis, recurrent severe hæmoptysis, empyema, etc.; this has been amply shown by experiences after the last war. In any individual case in which symptoms have not yet arisen, and especially when the foreign body is deeply placed, it is clearly desirable not to recommend removal of the missile. Actually, in the hands of a competent thoracic surgeon removal of these bullets and shell fragments is not difficult, nor does the operation carry a high mortality or morbidity. The results of segmental resection of the portion of lung containing the foreign body, where this is feasible, are particularly good. When an empyema overlies a lung containing a foreign body, it is clear that removal is not possible unless there is an accessible track actually leading down to the fragment. After the empyema has been drained, and the cavity obliterated completely or as far as possible, the foreign body may then be attacked. Opaque oil injected into the residual empyema often reveals a track leading down to the fragment in the lung.

THORACO-ABDOMINAL WOUNDS

These combined injuries are necessarily serious, and many are rapidly fatal on the scene of battle or aid-raid. Although the mortality has been very high, we need not be too pessimistic about them, for with prompt and bold treatment many can be saved. In the early part of the last war the mortality from these wounds was over 80 per cent. By bolder surgery and greater familiarity with the chest and also the wider use of blood transfusion, the mortality fell steadily until in 1918 it was about 30 per cent., and some surgeons were able to produce a series with a mortality of only 20 per cent. Briefly, the injury to the chest should be considered and treated upon the lines

laid down above. That is, in certain types of small perforating wound without hæmothorax no operative interference will be needed, but with open wounds, leaking hæmothorax, large retained foreign body, etc., thoracotomy may be needed. The abdominal injury has to be considered likewise as a separate problem up to a point. If the injury has been caused by a small fragment and from its direction of travel and its radiographic location it is reasonably assumed to be in a solid viscus (*e.g.*, liver) and there are no signs suggesting injury to a hollow viscus, then the abdominal injury may be treated conservatively. In some cases it may not be necessary to operate on either chest or abdomen; in others either the chest or the abdomen may require operation. In a small group, operation may be needed on both chest and abdomen. In these the chest should be dealt with first and the diaphragmatic wound then enlarged and the abdominal injury repaired. Should access be incomplete in this way it may be necessary to carry the thoracotomy incision forwards and downwards through the costal margin to do a combined approach. This step increases the severity of the operation and is associated with a higher mortality, although this may be in great part because it is naturally more often needed in more gravely injured patients.

Of the dozen or more patients with thoraco-abdominal wounds that have come my way since the war began, only one has succumbed, and this was a soldier who had big entry and exit wounds through which were prolapsed omentum, colon and lacerated spleen; two big holes were present in the diaphragm, and the thorax and abdomen both contained much broken cork from a lifebelt, and odd scraps of clothing. As, in addition, this wound had been received forty-eight hours before you may judge that his chances of recovery were really remote.

It is surprising how often one finds, in doing a thoracotomy in cases of chest injury, that the diaphragm has been injured and that a small knuckle of omentum has prolapsed through the hole. Although many such cases doubtless suffer no later symptoms, in others the hole progressively enlarges and a serious diaphragmatic hernia of an important viscus such as stomach or intestine develops and may prove fatal unless repaired surgically.

The Young Surgeon After the War—A Rejoinder

By T. B. Layton, Esq., M.S.

I AM unable to find the name of Daniel Whiddon in our list of students or in the Medical Register; I must therefore assume that he is an agent of an investment company, or that the name is a pseudonym for a hoax. In either event it is, perhaps, well that the article has been written. It shows that such commercialised medicine has been in existence, or that there are people who believe it has, and expect it to happen again. There are quite a number of laymen who have been saying that practices such as your article describes have been in existence; and we have been denying it, or we have been admitting that it may have occurred among a limited number of irresponsible individuals unknown to us or to the profession at large, but that it has not occurred among the staffs of the voluntary hospitals and certainly not among those to whom teaching schools, undergraduate and graduate, are attached. Now we have an article describing one in a hospital gazette, which the layman and many in the medical world believe represents the code of the institution whose name it bears. They will be unable to follow the surgico-pathological reasoning of the last column of the article, or to recognise that the whole of it is written in a vein of sarcasm. But it is easy to interpret it—and some will—as the advice put out to young men desirous of getting on the staff of our or of any other hospital when the war is over. It is time, therefore, for us to take some notice. Even to suggest that surgery can be carried on as a purely commercial transaction with all the advertising, boosting and propaganda of a modern film star is bad enough.

There are two wide principles which this article brings up. The first is the existence of the Voluntary Hospitals; are we to remain after the war? and, if so, how? There are quite a number of people who can see no reason for our continued existence, and we who believe in ourselves have yet to show cause for it. Our evidence must be positive and negative, and the negative must include a proof that no voluntary hospital is run generally for the benefit of the staff rather than that of the patients, and that at no hospital is the administration such that it can occasionally be possible. It is no good saying that such things do not occur. There are people who say that they do. We have got to prove the negative.

The other principle that arises is that of borrowing money, to purchase or to start a medical prac-

tice of any sort. There is nothing wrong in this, and on the face of it no harm can come. Nor does it when the money is borrowed from parents, relatives or friends who are not likely to use their financial power to the detriment of the patients. When, however, the borrowing is from an investment trust or an insurance company danger lurks ahead. There is no sentiment in such bodies. Their money must be safe; they have to protect the pockets of their clients; the lives of their borrowers' patients mean nothing to them. We have recently read and seen this principle working, in the Grapes of Wrath, as applied to the life of a farming community. We have the same danger in the medical world as soon as young doctors borrow £3,000 from an insurance office. In consultant work it is not yet in evidence, though your article suggests that it is in existence by means of an excessive performance of wrong or unnecessary operations. In general practice the danger is already with us. The building up of a practice for sale on death or retirement has always been looked upon as a proper and honourable way of saving money for old age or for dependants. There are some purists who say that this is wrong because it is a form of selling human lives; probably this is the reason why the nation has never admitted the right of a doctor to sell his panel practice. So long as the capital value is used only as an investment to keep the practitioner in his old age or to help his dependants in the event of his premature death such purists can probably be answered; but there are springing up two things which justify their statement and thus jeopardise the whole system upon which the capital value of practices is built. The one is the custom of a doctor setting up in some district, boosting a practice for a year, putting in an assistant, and after another couple of years selling it to the assistant, and then going and doing the same in another district—if, indeed, he, she, or the family are not already keeping two or three such practices going at once.

The boosting is done in the flashy ways described in your article, suitably adapted to the different atmosphere of a general practice among people with small incomes. The removal of the personality who has temporarily attracted the patients results in the practice collapsing, the doctor losing all his money, and, most important from the national standpoint, the patients being left without that continuity of doctoring which is the valuable part of our old general practice system. The other thing that is arising is that the practice becomes the security for the money borrowed from the financial body. The control of it then gets into the machine, and even if the general manager and the chairman are warm-hearted persons when they come in contact with suffering individuals, they are powerless when dealing with human beings in numbers away from the personal touch. The practitioner is unable to pay his interest; a little time is given him; he fails again. He is put out of the practice and another is put in, either at a salary from the investment trust or by buying it from them with a further sum of money advanced by them. Human lives are being bought and sold, and both these doctors are driven into ways which they first loathe, then tolerate, and finally think to be ethical.

There are able and conscientious men who believe that the best thing for this nation is to bring all doctors into a civil service as salaried officials under the State. They have plans ready to put forward at any time. There are some of us who think that this would be the end of initiative and of freedom; who recognise that State service will be the life's work of many more than in former times, and who see no harm in its becoming a part of the life's work of the majority, but who maintain that advances come from the unorthodoxy of the few rather than from the conformity of the many, and who believe that unorthodoxy cannot flourish if the whole profession is in a whole-time State service. These must begin to get together notes for the brief that we must prepare to oppose the schemes for a State service, and one of the points must be some amendment to the conditions under which a practice can have any saleable capital value.

I should like to put in a word for those of us who have written much, or have had big cars, to each of which I must plead guilty; but time forbids as I wish to end with a warning to the younger men. Starting again was not easy after the last war; it is likely to be harder after this. The majority of men in the medical profession with established practices and the expenses commensurate with them are engaged in wondering where to find the capital with which to pay an increased income-tax on last year's figures with a very materially diminished income. There are, however, a large number of younger men who are earning far more now than they would have had there been no war. They may have to come down plump in the middle of it. They will have to do so at the end. A double fall will be very painful. The most important thing in facing this is not to have arrived at too high a standard of living before it comes. For this reason they should spend as little as they can. But there are two other reasons: So far from thinking of £20,000 in five years' time, they will be doing well if, supposing the pound to retain its present value,

they are earning a thousand a year at the age of forty, and can maintain one of two thousand for a few years around the age of fifty; but they will need something on which to exist before they do this.

In addition, there is the national duty to save. House-officers, therefore, who would have had their board and lodging only in peace time and are now getting three pounds a week in addition should save two of these. Then there are men who would have been junior members of the junior staff earning £250 without their keep, and who are now getting £550 and their board and lodging. If they put away £300 they are still better off than they would have been had there been no war, and must put aside another £50 before they can claim to be doing anything for the national effort. Above them are the older members of the junior staff, who would have been doing well on £500 a year without any war. They appear to be best off with £800 and their board and lodging. They are not, because with a wife and one or two children they are going to feel the drop at the end of the war most of all. They are also going to find the age of forty looming very near, though at present it seems far away. I would urge them, in their own interest, to save £450, and, if possible, £500, out of their present salaries. Their investments should aim at the capital sum remaining the same at the end of the war rather than at their getting any interest on their money in the meantime.

Sector News

Guy's Letter

IT is interesting to compare the Guy's of this last fortnight with Guy's of a year ago. Then, as now, all of our civilian sick that were transportable were discharged or evacuated; once again, in a matter of days, the Hospital has been transformed into a casualty clearing station. The sole difference lies in the unfortunate fact that we now have to deal with real casualties, not with skilfully painted imitations from mock raids. We were prepared then to function at an hour's notice, but instead we were given a whole year in which to make and remould our plans. We think we can claim that this time has not been wasted. Real experience has revealed, of course, a few defects in the organisation, but none of any moment. The greatest of these was to ensure that every member of medical and nursing staff and of the student body should receive adequate off-duty and sleep, and this was early rectified. A rota for all, with specific duties to perform, now provides for two days on duty, two days on call, and two days off duty for everyone.

The reception of casualties, which commenced on Friday night, swelled to large proportions on Saturday and then maintained itself as a steady trickle, proceeded entirely smoothly. The resuscitation and post-operative wards left little to be desired, and the re-evacuation of cases, so essential to maintain always an adequate number of reception beds, has been most prompt and efficient.

We are especially grateful to the students, who have carried stretchers and pushed trolleys, put up drips and assisted at operations, and who have also waited for hours with nothing to do at all.

All of our civilian cases, who could be treated at home by their own doctors, have been discharged; the rest remain and urgent cases, both medical and surgical, are, of course, still admitted. The Out-Patients Department continues, but routine bedside teaching must for the moment be but fragmentary. As things become stabilised, this also will come up for consideration, but for the moment there are ample lessons of great importance to be gleaned from the resuscitation wards. The Hospital itself has now become a casualty, but we shall continue to perform our air-raid functions.

N. A. N.

Farnborough Letter

NOW that the long-awaited aerial attacks on London have commenced, the conditions expectation of which has justified our residence in the pleasant land of Kent for over a year, have arrived. When, that Saturday afternoon, we watched score upon score of bombers inevitably bearing down on the Capital, which soon became obscured in smoke, we were prepared to do our share in the reception of casualties.

The necessity for our being ready to deal with the results of attacks in other quarters, which now appear so imminent, caused the evacuation of the patients elsewhere. However, our beds have not been allowed to remain entirely empty. Take-ins have always contained a proportion of chronic cases, ("Granny is getting too much for us"); but even where Granny could be managed before at home the problem of her removal several times a day to the shelter can be insuperable. So off she goes to hospital! Or what better depository

could there be for Grandpa when the family want to move to greater safety? However sorry we may feel for these people, it seems a pity at a time like this that such cases should encumber the accommodation in a hospital equipped and staffed to deal with acute work, while institutional treatment is all that they require.

At a time when travelling is becoming increasingly difficult, it is easy to get out of touch with other parts of the Sector. Therefore the following incident in the life of another hospital, as reported by a colleague, may be of interest: "When I entered the ward it was dimly lit and rather stuffy. There were no patients, but round the fire were sitting a group of people, some toying with some half-finished stock, others conversing in low tones. A hushed voice asked me to take some refreshment, which I accepted gratefully, and my voice seemed to startle the group as a shot-gun will a flock of birds. The whole atmosphere reminded me of nothing so much as the interior of a doomed submarine, and I remarked on the fact. 'Ah!' whispered a voice, 'wait till you have been through what we have.'"

G. L. L. R.

Orpington Letter

ONE of the most remarkable facts about the war is the rapidity with which the British people readjust their outlook following grave calamities. The collapse of France was dramatic and unbelievable in its suddenness, but within a week we had swallowed the fact that we were alone in the struggle, and came up fighting with increased vigour. The latest phase in the battle has called for the greatest readjustment we have yet had to make. This time the change is a more practical one for we are concerned with our personal safety and our sleep, both of which are threatened.

Here, at Orpington, we have nearly completed our readjustment and soon the idea of sleeping in a bed will be quite foreign to us. By far the greatest strain is thrown upon the Nursing Staff whose behaviour and spirit have been magnificent and have been praised highly by two fighter pilots who have recently been in here. We strongly urge that every step be taken, and taken quickly, to ensure for them the greatest degree of safety and comfort possible.

Apart from the widespread rain of shrapnel and a few pieces of what has been diagnosed as a Molotoff bread-basket, we have escaped further injury since our last bulletin.

Pembury Letter

WE feel it almost an impertinence to write about Pembury when the eyes of the world are fixed on London. Whilst we have not been entirely neglected, we know our trials are infinitesimal compared with the ordeals of the capital.

The incident which stands out most in our minds this week, is a mother whose home in E. London had been demolished, her husband's place of work consumed by fire and her child brought to us with "shattered nerves." No doubt human misery can go beyond even this: but why?

In recent days, part of a hospital in which your correspondent holds an Out-Patient Clinic, has been demolished. We are, personally, happy to relate that we "foxed" Jerry, by not being in session at the time!

This week we bid a sad farewell to Poulton, who leaves us for the Army. We have also welcomed Leedham, who was doing an appointment at another hospital until it was reduced to a mass of rubble. However, we are glad to say that in a world where buildings are coming down our spirits remain as high as ever.

N.M.J.

Correspondence

Guy's Under Fire

To the Editor of the GAZETTE

SIR,—May I, as an eye-witness, put on record my very high appreciation of the really splendid way in which everyone in the Hospital on Sunday night rose to the occasion and dealt with the emergency created when four high-explosive bombs dropped on the Hospital. Everything went like clockwork, and one might have supposed that the entire incident had been carefully rehearsed. There was a complete absence of panic—though it is true that brandy was administered to me by a solicitous registrar—and the acts of heroism that were performed by all sorts of people are too numerous to mention. I am afraid the German gentleman who dropped the bombs would have been very disappointed in his efforts at *Schrecklichkeit*.

Yours, etc.,

P. M. F. BISHOP.

Superintendent's Office,
Guy's Hospital, S.E.1.

The Physical Society Meetings

To the Editor of the GAZETTE

SIR,—May we appeal for the recommencement of the Physical Society Meetings? Shortly after the outbreak of war, students posted to Farnborough Hospital were sufficiently keen to organise Physical Society meetings, which were attended by many members of the staff.

We understand that Pembury students also ran their own branch of the Physical Society with success.

There are now at Guy's very many students, some of whom have never had the opportunity to appreciate the meetings, and others who, having attended them in pre-war days, regard them as the best possible method of learning

Surely Guy's can do what the base hospitals have already done

Yours, etc,

D. W. BURGESS.
G. E. McFALL.
E. ROBINSON.

Hospital Routine in Air Raids

To the Editor of the GAZETTE

SIR,—How are the mighty fallen! During the last Great War Guy's proud boast was "Business as usual," but this morning I visited the Pathological Block just after the air-raid warning sounded, and shame and humiliation sat heavy upon me.

On my way up the stairs (for the lift had been immobilised) a feminine worker in a white overall, hurrying down to take cover, informed me that, "according to instructions," I should not find anyone in the laboratories, as all were below in the shelter. Sure enough, when I reached the bacteriological laboratories, they were empty, and might have been looted with impunity.

It seems inconceivable that the Bacteriological Department has no work to do, and can therefore take a rest whenever the sirens go, so why do those responsible for the "instructions" choose to play Hitler's game, and stop essential services? Surely this savours of Fifth Columnism!

The irony of the situation was emphasised, for in full view of the laboratory windows the bricklayers and labourers employed upon the new block of buildings for nerve cases were obviously carrying on without interruption, warning or no warning. Surely something must be rotten in the State of Denmark!

Yours, etc.,

JNO. EYRE.

51, Portland Place, W.1.

(Since the establishment of the roof-watcher system, the inconveniences described above have disappeared and the Bacteriology department is carrying on with its customary efficiency.—ED.)

Hospital Information, etc.

Papers by Guy's Men

Rushton, Martin A. A case of dentinal dysplasia. *Brit. Dent. J.*, 1940, **69**, 165.

Blaikley, J. B. Some common ovarian disorders. *Practitioner*, 1940, **145**, 175.

Ogilvie, W. H. Abdominal actinomycosis treated with sulphapyridine. *Brit. Med. J.*, 1940, *ii*, 254.

—— The late complications of abdominal war-wounds. *Lancet*, 1940, *ii*, 253.

Lloyd, V. E., and Erskine, David. Sulphathiazole and sulphamethylthiazole in gonorrhœa, *Lancet*, 1940, *ii*, 186.

Symonds, C. P. Cerebral thrombophlebitis. *Brit. Med. J.*, 1940, *ii*, 348.

Awards

Mentioned in Dispatches

Temporary Surgeon-Lieut. Donald Norman Leeming, R.N.V.R., has been mentioned in Dispatches for courage and devotion to duty during the withdrawals from Boulogne and Calais.

Changes of Address

P. H. Beales, Royal National Orthopædic Hospital, W.1.

J. Kenneth Donald, Surg.-Lt. (D.), R.N.V.R., c/o Admiralty, S.W.1.

E. R. Hodgson Todd, Flying Officer, R.A.F. (V.R.).

Births

MACKENZIE.—On July 6th, 1940, at Pietersburg, Northern Transvaal, South Africa, to Wendy (née Fox), wife of Dr. L. G. MacKenzie—a daughter.

BUGG.—On August 31st, 1940, to Mairi (née Mort), wife of D. W. Bugg—twin daughters.

Marriage

HANCOCK — CHRISTOPHERSON. — On August 24th, 1940, at St. Mary's Church, Wimbledon, by the Rev. Derman Christopherson, Lt. John Gordon Hancock, B.D.S., elder son of Mr. and Mrs. Hein Hancock, to Betty, younger daughter of the late Horace Christopherson and of Mrs. Christopherson, of Wimbledon.

Deaths

HOPE.—On September 12th, 1940, Walter B. Hope, M.R.C.S., L.R.C.P., at Greenbank, West Malvern.

LAVINE.—On August 28th, 1940, Louis Lavine, M.D., M.B., B.S., of Hull, aged 44.

EDS. { N.A.N. B.S.L.

GUY'S HOSPITAL GAZETTE

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PASSIM

ANOTHER fortnight of Blitzkrieg has been hurtled upon London; we can look with pride upon the manner in which the greatest city in the world has adapted itself to the daily and nightly wail of the sirens. The motto, "Business as usual," has been fulfilled to an extent that seemed very improbable on the first Saturday afternoon, when the break-through occurred. The major part of the credit for this must be given to the amazing tenacity of the people, a spirit that has become increasingly more formidable as time has gone on. The authorities have applied themselves energetically to the problems that have arisen, although in individual instances there has been delay and some confusion.

Their task has not been an easy one; the multiplicity of the problems and of the different departments involved in the solving of any one problem has hindered their working. In prompt recognition of the urgency of the situation, special commissioners have been appointed to co-ordinate those departments which deal with the provision of shelter and food for the homeless, the extension and improvement of public shelters at night, and the maintenance of public transport. The evacuation from London of mothers and babies is recommencing, while that small percentage of London parents who allowed the evacuation of their children to the country under the Government's original voluntary scheme may well feel proud of themselves to-day.

The full weight of the effect of the Blitzkrieg upon the health of the people has yet to be felt. The unusually long and sunny weather has mitigated the evils of hardship and exposure. The organisation for the reception, treatment and evacuation of actual air-raid casualties has worked very efficiently; when one hospital has been put temporarily out of action, others in the district have been able to take over its work, until it is running again. The treatment and disposal of civilian sick in London this winter may well prove an equal or greater burden. In the first place, already many aged and infirm have been received into hospitals, some with heart failure or bronchitis, others for no medical reason at all; they have lost their resiliency, the nightly adventure to public or private shelter is beyond their powers of endurance. The chronic arthritics similarly, who have been looked after and carefully tended at home by their relatives, become hospital cases again, when their home is demolished, for they are difficult to manage in a school or other temporary centre. Many of these, after two or three days and nights of rest, are so rejuvenated that they wish to go out into the fray and rebuild their scattered homes; others, however, will require institutional treatment throughout the winter. The diabetics are another problem; the results of a day or two with no regular diet or insulin may necessitate several weeks before stabilisation is again secured, or may even precipitate coma. The home treatment of peptic ulcer is greatly obstructed by the lack of rest and the state of general anxiety; hæmatemesis certainly appears to be a commoner event now than in former days. This list could be magnified; the number of out-patients who will require in-patient treatment for longer or shorter periods may well be considerable. Admission and rapid evacuation to base hospitals, or to institutions in the country where appropriate, is the only solution to this problem.

Secondly, the winter is approaching; the effects of rapid transmission from warm rooms to cold damp air, thence to stuffy shelter and back, upon the general health of the community cannot be estimated; the aged will certainly suffer greatly. A commission of enquiry has already been set up upon the questions of ventilation, sanitation and general hygiene in the large public shelters.

However much these be improved, the effect upon the incidence and rate of spread of acute infections and of the specific fevers cannot yet be estimated. With the lack of facilities for the home treatment of even simple bronchitis, the hospital admission rates will certainly be greatly increased; rapid evacuation will again be necessary to maintain the adequate reserve of beds for air-raid casualties. The system of Sector Hospitals and the whole organisation of the Emergency Medical Service was evolved a year ago to face these very problems. On the whole, the system has functioned well; it has had a year in which to find its feet, and now we await with interest its reactions to the magnitude of this winter's problems.

Our own Hospital is necessarily, for the moment, functioning simply as a casualty clearing station for air-raid casualties. Urgent medical and surgical cases are, of course, still admitted. The Out-Patient Department is running normally, but for the in-patient treatment of less urgent cases the base hospitals will come to be utilised to an ever greater extent. The chief problem which assails us is the maintenance of our high standard as a teaching hospital and the provision of ample illustrative clinical material. Fortunately, the difficulties are not unsurmountable, and by means of distribution of the students throughout the Sector, an adequate curriculum has been maintained for them.

Cerebro-Spinal Meningitis

A Clinical Lecture delivered at Guy's Hospital on 23rd August, 1940, by N. Mutch, Esq., M.D.

GENTLEMEN,—This disease—essentially an infection of the brain and meninges by the meningococcus—has been recognised clinically since the beginning of the last century. Sporadic cases are reported every year, but from time to time the incidence increases to epidemic intensity. Outbreaks are associated particularly with war-time conditions under which large sections of the community herd together in camps, huts, depots and dormitories. The last serious epidemic spanned the years 1914 to 1918—the period of the Great War. The present war was only a few months old when the disease broke out once more. Over 5,000 cases were reported during the first half of the current year. The epidemic has waned somewhat in recent weeks, but a recrudescence can confidently be expected in late autumn if the war continues and December will probably find us struggling once more with the major manifestations of the infection.

PATH OF INVASION

The organism, a gram negative diplococcus, is usually present in the nasopharynx and it is commonly agreed that it gains entrance to the body through the mucous membrane of this region. It can also be recovered from the blood, and in fulminating cases with meningococcal septicæmia death may intervene before any anatomical changes have been produced in the brain or meninges. There is, however, still some debate concerning the path of its conveyance, certain pathologists suggesting that invasion takes place more directly by way of the local lymphatics. The brain becomes congested and œdematous. Perivascular infiltration, capillary hæmorrhage and thrombosis occur and extensive degeneration of the nerve cells quickly follows. The inflamed pia arachnoid is covered with exudate and the cerebro-spinal fluid, turbid with pus cells and leucocytes, contains free organisms and others already engulfed by phagocytes.

SPREAD OF INFECTION

The meningococcus does not possess any high degree of infectivity. In this country and in America nasopharyngeal carriers are ubiquitous. The usual carrier rate varies between 2 and 5 per cent., and a rise to 20 per cent. usually heralds an epidemic. The disease itself and carriers of the organism are unknown except in man. The survival time of the isolated organism is short. An individual therefore cannot contract the disease except by close association with a human already infected by the germ. During an epidemic carriers may be twenty times as plentiful as patients. The infecting person is therefore almost always a carrier, and spread can rarely be attributed to contact between patient and patient. Two types of carrier are known, namely transient carriers who harbour the organism for a few weeks only, and chronic carriers with chronic infections of the sinuses and nose. The latter are the more dangerous.

CLINICAL VARIETIES

Several distinct clinical varieties are recognised, and the infecting organisms have been grouped bacteriologically into several types. There is, however, no correlation between clinical variety and bacteriological type. Meningococcus types 1 and 2 have both been isolated from the Farn-

borough cases, and examples of almost all clinical groups have been seen there during the last nine months.

(1) At the beginning of any epidemic fulminating cases occur. A pilot at a nearby aerodrome felt ill one evening and reported sick next morning Being pyrexial and collapsed he was brought at once by ambulance to hospital and died a few hours later, about sixteen hours after the onset of his earliest symptoms. A pure growth of meningococcus was obtained from the blood by Dr. Colbeck. At post-mortem his brain and meninges presented normal appearances, but extensive hæmorrhage had occurred in each suprarenal. Bilateral suprarenal hæmorrhage is often found in such fulminating cases, and the clinical grouplet has been given the exalted title of the Waterhouse-Friderichsen syndrome.

(2) The commonest mode of onset is abrupt with pyrexia, persistent headache and marked leucocytosis. Mental irritability, confusion, drowsiness and sometimes coma follow during the next two or three days. Head retraction and Kernig's sign are early phenomena. Herpes labialis frequently develops about the fourth day. Although the colloquial synonym for the disease is spotted fever, the corresponding purpuric rash is not often seen. Diagnosis does not present any difficulty. The clinical evidence of meningeal and cerebral irritation is clearly defined. The turbid cerebrospinal fluid containing pus cells, leucocytes and meningococci is characteristic, and its pressure is usually increased two- or three-fold. It must be confessed, however, that during epidemics many cases occur which present signs of the disease clinically and in the cerebro-spinal fluid which are diagnostic in every respect save in the failure of the bacteriologist to see the meningococcus or to obtain any growth on culture.

(3) A catarrhal inflammation is often apparent in the nose for a few days prior to the onset of the main illness. You will remember that the nasopharynx is accepted as the portal through which entry is made either to the lymphatics or the blood. In exceptional cases the respiratory infection may be conspicuous, and in one small boy at Farnborough it took the form of a widespread persistent bronchopneumonia which eventually ran its course side by side with that of the cerebral lesion. Sister Poyser's exceptionally skilful nursing, an oxygen tent and chemotherapy were all required to save the patient's life.

(4) Certain cases of a milder type are not diagnosed at all in their earlier stages and present themselves several weeks after the onset with signs of encysted hydro- or pyocephalus. Even modern methods of treatment cannot restore these patients to any semblance of normality.

(5) One final variant merits notice, namely the rare persistently febrile form in which cerebral symptoms are inconspicuous and a temporary diagnosis of pyrexia of obscure origin has to be made. Fortunately, examination of the cerebrospinal fluid always reveals definite signs of meningeal involvement—an increased cell count, a few polymorphonuclear leucocytes, a rise in protein, and particularly a rise in the globulin fraction.

COMPLICATIONS

Albuminuria is frequent but not nephritis. Infective conditions such as iridocyclitis and orchitis are not rare. Adrenal hæmorrhage and early respiratory infections have been mentioned already, and to the latter must be added the hypostatic broncho-pneumonias of the terminal phases. Here I would like particularly to stress the common occurrence of arthritis. Its incidence varies from 5 to 10 per cent. One or more joints become tender and swollen and contain an excess of synovial fluid, turbid with polymorphonuclear exudate but sterile. Rarely if ever can the diplococci be found even in direct smears. The swelling may subside in a few days or persist for several weeks. In the latter event thickening of joint membranes supplements the swelling due to free fluid. Clinically the joints resemble those of chronic infective arthritis very closely, but the condition being incidental to a self-limited primary infection clears up completely at last and is not a prelude to the rheumatoid state. In one of the Farnborough cases, a woman of 53 with severe but non-comatose meningitis of average type, the right elbow was involved on the fourth day of the disease. Eventually it resolved satisfactorily, although swelling and disability persisted for several weeks after the normalisation of cerebrospinal fluid.

PROPHYLAXIS

The only preventive measures which have been found to be effective are free ventilation and the avoidance of overcrowding in places such as wards and dormitories where people are housed closely together. The risk of the inhalation of suspended droplets of infected material ejected by carriers during coughing, sneezing and speaking is in this way reduced to a minimum. In one set of hutment sleeping quarters it was found that where the bed spacing was 9 inches the carrier rate was 29 per cent.; where about 1 foot was left between adjacent beds it was 20 per cent., and the carrier rate fell to 5 per cent. in huts with a 3-foot interval between the beds.

TREATMENT

Until quite recently the accepted methods of special treatment for this condition were drainage by repeated (often daily) lumbar puncture and the injection of antimeningococcal serum by various routes, intravenous, intramuscular and intrathecal. Nowadays reliance is placed almost entirely on chemotherapy. Lumbar puncture is only carried out at weekly intervals or when there are definite signs of raised intracranial pressure. It is abundantly clear that serum treatment is no substitute for chemotherapy, and it is extremely doubtful whether the administration of serum as a measure additional to chemotherapy in any way lessens the severity or mortality rate of the disease. During the 1914 to 1918 epidemic 5,306 cases were reported in England and Wales. The mortality rate was 65 per cent. During the first six months of 1940 5,093 cases were notified, showing a mortality rate of 20 per cent. and there was no clinical evidence that the average severity of the disease had decreased in any way during the intervening span of years. Provisionally the credit for the reduction in the number of deaths is given to the sulphanilamide group of drugs now employed. It has proved impossible to differentiate between simple sulphanilamide and the far more expensive sulphapyridine. Individual observers of various groups of cases amounting sometimes to one or two hundred cases record mortality rates varying from 10 to 17 per cent. From the actuarial viewpoint these figures cannot be distinguished. They are influenced so greatly by the proportion of infants, fulminating cases and neglected or moribund cases included in the lists.

Posology.—Approximately identical for sulphanilamide and for sulphapyridine, *i.e.*, " M. & B. 693."

	Age Group				
	Adults down to 15 yrs.	*10 yrs.*	*5 yrs.*	*2 yrs.*	*Infants*
Total daily dose (grammes)—	9	7	6	4	3

Note that the dose is relatively much higher in infants and young children than in adults. Administration is made every four hours so that six doses are given every day, with the object of maintaining a uniform concentration of the drug in the body fluids. The course of treatment is continued for about a week and then omitted completely. It is useless, and may indeed be dangerous, to keep it up for any greater length of time. The scheme is adjusted to the severity of the attack as follows :—

Full dosage for 2 days in mild cases, 3 days in severe cases.

Two-thirds dosage for the next 2 days in mild cases, 3 days in severe cases.

One-third dosage for the next 2 days in mild cases, 3 days in severe cases.

In cases of exceptional severity supplementary doses of soluble sulphapyridine are given intravenously. The ampoules supplied contain 1 gramme in 3 cc. The contents are diluted with a little saline and injected at the outset and again at the time of the second administration. Each injection should raise the concentration of the drug in the blood and cerebro-spinal fluid by about 2 m.g. per 100 cc. For comatose patients the drug should be powdered and administered in suspension through an œsophageal tube. Intramuscular medication is impracticable. The expense and difficulty of injecting the contents of nine 3 cc. ampoules daily are appreciable and the damage to the tissues is considerable. Seepage into the subcutaneous tissue causes pain and swelling and often leads to sloughing and ulceration. Even the muscles are damaged. The fibres lose their striation and become separated by exudate and, unless the local circulation is satisfactory, necrosis follows. In other cases resolution takes place after a period of induration and pain. There is still scope for an inexpensive soluble form which can be given by rectum to unconscious patients and others with troublesome cerebral vomiting.

Subsidiary methods as yet but little tried, are suggested by the frequent occurrence of suprarenal hæmorrhage in rapidly fatal septicæmic cases. The suprarenal cortex is particularly rich in Vitamin C. It might therefore be advantageous to give large doses of ascorbic acid as well as generous amounts of the fresh juices of citrous fruits, *e.g.*, an immediate dose of 500 mg. of the sodium salt in 10 cc. given intravenously and followed by 50 mg. of the acid by mouth three times daily for the next few days. Injections of cortical extract or of its cheaper near-kinsman desoxycorticosterone, *e.g.*, 5 mg. intramuscularly, might also save some of those who would otherwise die. I have not yet had any opportunity of determining whether these measures are efficacious or not, but put them forward tentatively as reasonable suggestions.

Finally, you must remember that an unconscious pyrexial patient rapidly becomes dehydrated. It is essential to counteract this process by giving fluids copiously through œsophageal or rectal tubes or else by an intravenous drip of glucose-saline.

Insulin Substitutes—Résumé of Present-day Knowledge

By G. R. W. N. Luntz

EVER since the connection between diabetes and the pancreas was established some thirty years ago, numerous attempts have been made to produce a pancreatic preparation which would be of value when taken by mouth. Raw fresh pancreas and innumerable dried extracts, prepared in various ways and sold at high prices, have been tried, not only in this country but also abroad. Although a vast amount of work has been expended investigating the large number of new insulin substitutes produced each year, in the majority of cases the results are negative, a few gaining a temporary and very limited acceptance.

At present there are still very many preparations of this kind on the market, their popularity being partly due to adroit and cunning advertisement and partly to the enticing bait of oral administration. So far, however, no alleged remedy when taken by mouth has been found to have any effect whatever in tending to cure or alleviate diabetes: the improvement attributed to the oral preparation has, in reality, been due to the strict diet the patient has been put on at the same time. In other words, the patient would have done equally well if put on the diet alone.

The administration of oral preparations in severe cases of diabetes is a very serious matter, for here they are more likely to be harmful by delaying the proper treatment with insulin injection plus diet. In addition, the prolonged use of these inert substances does a great deal of mischief by allowing the disease to progress to what not uncommonly proves to be a dangerous stage.

Usually, when treatment with the various pancreatic and other oral preparations is commenced, the patient is put at the same time on a restricted diet, the latter being the basis whereby the oral preparations secure credit. R. D. Lawrence, of King's College Hospital, and other workers have shown by repeated controlled experiments that in no instance have the oral products had any beneficial effect in diabetes, while in many instances it has been shown that diabetic coma is produced by the attempt to substitute such preparations for insulin in severe diabetes.

A warning against such preparations, therefore, seems necessary. For, notwithstanding the tremendous publicity given to the modern scientific treatment of diabetes, reports continue to appear of deaths following discontinuance of insulin by some patient on the recommendation of osteopaths, Christian science healers, naturopaths, herbalists and other quacks.

Several herbs are known to contain hypoglycæmic principles. However, no one with the simplest understanding of the physiology of the pancreas and pathology of diabetes mellitus would ever consider any of them as adequate substitutes for insulin. It matters little in minor ailments if the patient wastes his money on "patent remedies," but this may have serious consequences in a severe disease like diabetes, which would otherwise readily respond to insulin treatment.

Innumerable investigators continue to seek an oral preparation which will suitably control diabetes. The experiments thus far have not given much promise of success. In the meantime, therefore, physicians may well emphasise constantly the specificity of insulin in the successful management of diabetes. Successful management of the disease with insulin means prolongation of life. Until some preparation equal or superior to insulin is developed, patients must be made to realise the dangers of using any other remedy, particularly any herbal preparation which may be advocated, usually on the basis of avoiding hypodermic injections.

Though a herbalist or other quack may occasionally, through certain psychological reactions to his personality, procure improvements to some conditions with a nervous or hysterical basis, the danger to public health, particularly diabetes, is such that little sympathy should be wasted on the exponents of irrational medicine. It is not the medical profession which has to be provided with a system of protection. It is rather the public which has to be saved from the plausible appeal of those who rarely have any interests outside their own pockets.

Premature publication of experimental results, especially anything which may be interpreted as advocating a new herb for the oral, non-insulin treatment of diabetes, may menace the lives of human beings. When such items are exploited by the press, people are led to abandon specific treatment which to them may mean the difference between life and death.

While the diabetic world may hope for the day when a successful oral treatment of the disease will become available, to-day we must exert every effort to educate the victim of diabetes in the dangers of abandoning life-saving insulin preparations.

SYNTHETIC COMPOUNDS WITH AN INSULIN-LIKE EFFECT (GUANIDINE DERIVATIVES)

With regard to the various synthetic compounds with an insulin-like effect which have been advocated on the Continent, it has been clearly shown, after careful clinical trial in this country, that, except in certain very mild cases, their use is impracticable or even dangerous and that in no respect can they take the place of insulin.

As long ago as 1918, Watanbe published several papers dealing with the effect of guanidine on metabolism and showed that this compound possesses marked effects in lowering blood-sugar. Frank and his colleagues working in Minkowski's clinic at Breslau repeated these experiments and, finding the observations correct, carried the investigations further. As a result they eventually produced a compound, which they named Synthalin and which seemed sufficiently satisfactory for clinical trial.

A German product (Schering), synthalin is stated to be deca-methylene diguanidine hydro-chloride. It was reputed to have an action similar to that of insulin with regard to lowering of blood-sugar; at the same time it possessed the advantage of being effective by oral administration. The latter property would be a powerful advocate in favour of the German product, since the chief disadvantage of insulin is the fact that it must be employed hypodermically. Exhaustive tests of the compound in this country have not substantiated these claims, and have shown that the disadvantages of synthalin outweigh its advantages. That it has a definite effect in lowering blood-sugar and ketosis in the urine, in some cases at least, is undeniable, but this action is much less powerful and slower than that of insulin. The overwhelming objection to its use, however, is the fact that it possesses toxic properties. In many patients it sets up gastro-intestinal disturbances (nausea, vomiting and diarrhœa), which may be comparatively severe and it has caused jaundice and hepatitis in some cases.

High claims have been made in Germany for the therapeutic value of synthalin in diabetes. The benefits claimed from its use abroad have been unsubstantiated by work in this country, but A. T. Todd, of Bristol, recommends the synthetic guanidine derivative in his book, "Treatment of Some Chronic and 'Incurable' Diseases." He strongly recommends it in place of insulin, which he condemns as an unsound form of treatment, as insulin is not essential for the utilisation of carbohydrate. Only in coma does he consider it essential. Todd maintains that in diabetes the liver is involved rather than the pancreas, and synthalin, though slow in action, is highly successful in its results.

Many of the reputed substitutes for insulin are harmless, and owe what reputation they have acquired to their use in diabetics of the type that do not require treatment; or, alternatively, any slight improvement attributed to the remedy has, in reality, been due to the strict diet imposed on the patient. But synthalin is harmful, as it is a toxic drug which lowers the blood-sugar, not by promoting increased oxidation of glucose, but by a toxic action on the liver. Accordingly, one must hesitate to use temporarily, and certainly permanently, a drug whose action is a toxic one and whose effect in checking sugar excretion is brought about by a pathological depression of metabolism unlike the physiological action of insulin therapy.

Neo-synthalin, a product containing fourteen methylene groups instead of ten as in synthalin, appears to be less toxic, though perhaps not so active as the original product.

Another product for which a similar action is claimed, Glukhorment introduced by Van Noorden in 1927, has also been put to clinical trial and has been found wanting. A German product, Glukhorment has been proved by Dale and others to be a dried pancreatic extract to which small amounts of synthalin or synthalin-like substances are added. It owes what action it has to the added synthalin, and produces the same effect on blood-sugar and similar toxic effects of sickness and depression as synthalin.

It is clear that the synthetic products so far evolved cannot be compared with insulin in efficacy and are of little, if any, use in the practical treatment of diabetes; they cannot replace insulin in serious cases, while in mild cases, where they are most effective, their use is unnecessary.

SUCCINIC ACID AND THE CONTROL OF KETOSIS

Szent A. Györgyi, Professor of Organic Chemistry at the University of Szegedin in Hungary, who discovered ascorbic acid and identified it with vitamin C, made an important announcement late in 1937, which was heralded by headlines in the daily press. This was to the effect that ketosis can be controlled by the oral administration of succinic acid. His hypothesis was that the C_4 carboxylic acids, especially pyruvic acid, play a vital part in intermediate carbohydrate metabolism. It was surmised that in ketosis these C_4 carboxylic acids do not function, with the result that acetone is formed. The introduction of succinic acid (an acid obtained from amber,

$COOH.CH_2.CH_2.COOH$, containing four carbon atoms) prevents this by acting as the necessary catalyst.

Korànyi and Szent A. Györgyi tried the treatment in five cases of diabetic ketosis in their clinic. The results were satisfactory with four of the cases. In one of these, after insulin was stopped, the administration of 10 gm. of succinic acid by mouth completely removed a heavy urinary ketosis in four days. Discontinuance of the succinic acid caused the ketosis to reappear, when it was again controlled with 1 gm. of succinic acid and 10 units of insulin daily. The Hungarian workers have suggested that succinic acid by mouth may replace insulin injections.

R. D. Lawrence, R. A. McCance and Nora Archer experimented in London with the treatment in two cases with completely negative results. They hold that four successful cases in one clinic and two failures in another prove nothing, both publications being premature, and they consider that it is much too soon to advise treatment of diabetic ketosis with succinic acid instead of insulin.

D. M. Dunlop and W. M. Arnott working in Edinburgh tried succinic acid in three cases, the types and conditions of which were essentially the same as those of the Hungarian workers. Their results suggest that succinic acid has no effect in preventing the onset of diabetic coma, nor does it diminish a chronic diabetic ketonuria.

Szent A. Györgyi's theory of diabetic acidosis has been analysed by H. A. Krebs of Sheffield, who maintains that there is no direct evidence in favour of the Hungarian's view except its theoretical possibility and the few clinical reports submitted. Krebs has asserted that, theoretically, citric acid should have the same effect, as it represents a stage or two earlier in the intermediate metabolism of carbohydrates.

It is interesting to recall that in 1925 a synthetic fat, "intarvin," the glyceryl ester of marganic acid containing 17 carbon atoms, was recommended as a remedy for ketosis. Its action was based on a hypothesis not unlike that advanced for succinic acid, namely, that it stepped in at the right point in the metabolism and prevented the formation of acetone. It was not very favourably reported on and seems to have disappeared from therapeutics.

OTHER SUBSTANCES EMPLOYED IN DIABETES

E. S. Monteiro, of Malaya, reported in 1937 an investigation into the action of a decoction of Kadal Ranji, a root used by the Indians as a popular remedy for diabetes. Apparently, it has the property of rendering the urine of diabetics sugar-free by raising the renal threshold for the excretion of sugar. The author considers its use dangerous because of the sense of false security that it gives diabetics.

R. C. Large and H. N. Brocklesby, of Prince Rupert, British Columbia, have given an account of an experimental investigation of a hypoglycæmic substance extracted from the roots of the devil's club (*fatasia horrida*). It appears that the substance is quite different from any other plant substance of insulin-like action, is clearly hypoglycæmic in action when administered orally, and is ostensibly non-toxic. They intend carrying out further investigations with regard to its action on man.

In April, 1939, duodenal extracts were used in an endeavour to discover an oral preparation which would control diabetes, perhaps in a manner comparable to that of liver therapy in cases of pernicious anæmia or thyroid extract in myxœdema. Using duodenal extracts, L. Manzi reported fairly good results, but in a varying degree, for it was found that the effect of the extract varied in different cases, but not in relation to the actual severity of the case. It rather depends on the duration of the disease. In all Manzi's cases besides a diminution of the hyperglycæmia and of the glycosuria, there were observed a diminution in the diuresis and an increase in weight. Only in one case was the complication of diarrhœa noted. The preparation used has been termed Duocrine.

VEGETABLE PROTEINS FOR DIABETES

In 1938 a vegetable protein preparation called Proferin, derived from the germ of the carob or locust bean (*Ceratonia siliqua*), was used in the treatment of diabetes by Dr. W. W. Payne. His trials with this substance, which had appertained only to diabetic children, were inconclusive, but when Proferin was added to the basic diet a number of cases had been found in which there was no increase whatever in the excretion of sugar; in a number of other cases, while there was an increase, it was not of such an order as would have followed an equivalent amount of protein in the ordinary form.

Dr. R. D. Lawrence has also reported some slight experience of the Proferin preparation. It had no appreciable starch or soluble carbohydrate in the usual sense, and he considers it desirable that further work should be done on adult cases not having insulin.

PROTEIN INJECTIONS

Professor Gustav Singer, of Vienna, has written an interesting work on the effects of protein injections in diabetes. A pronouncement by

Gustav Singer is always of interest, and although this author cannot be followed to his ultimate conclusions, which are that protein injections form the basic treatment of diabetes, the method is a good contribution to treatment. The mechanism of action is not by any means clearly understood. Protein injections are powerful modifiers of metabolism, and to that extent their effect in diabetes may be due. It is, therefore, a method that merits further consideration.

EFFECT OF CABBAGE EXTRACTS ON THE BLOOD-SUGAR

Hopes that the cherished dream of an "insulin," which is effective when taken by mouth, would come true were raised two years ago when Professor A. D. MacDonald and Dr. Leo Wislicki reported a suggestive series of experiments performed in Manchester. Their account was prefaced by a summary of previous evidence that plant extracts may influence blood-sugar concentration, including certain clinical observations that diabetics tolerate carbohydrate eaten as vegetables better than carbohydrate in other forms.

Their own experiments, designed to discover a preparation which would lower the blood-sugar and not exhibit toxic effects when given by mouth, dealt with two extracts of cabbage, one of which (the hyperglycæmic extract) raised the blood-sugar of rabbits, caused glycosuria and diminution of the glycogen content of the liver, and could kill the animals in five to six hours. The other fraction (the hypoglycæmic extract) caused a reduction in the blood-sugar concentration of normal rabbits, the magnitude and duration of the effect depending on the dosage but not on the method of administration. For convenience the Manchester workers suggested that the name Vegulin be used for the extract. It is as effective by the mouth as it is by injection, but no hypoglycæmic convulsions have so far been evoked. A more striking experiment was performed on a depancreatised dog kept alive by injections of insulin. It was found possible to control the blood-sugar and glycosuria with the cabbage extract alone and to withdraw the insulin entirely. A two-day interval between withdrawal of the vegulin and resumption of insulin therapy was marked by an abrupt rise in the concentration of glucose in the blood and urine.

POSSIBILITY OF A SUBSTITUTE FOR INSULIN

The introduction of insulin into the therapeutics of diabetes mellitus solved the major problem in the treatment of the disease. By its continued use the diabetic is enabled to regain and maintain normal health, and there is now reason to believe that as long as he continues to receive adequate treatment, death will be postponed until he is overtaken by old age. In the light of these benefits it seems almost presumptuous to ask for more, but it is a clinical truism that a patient given health will demand comfort, and the inconvenience of daily injections is certainly a source of discomfort to some patients. With a view to removing this inconvenience, efforts have been made to find a substitute that could be given by the mouth. At present it must be admitted that there is no substitute for insulin in the treatment of diabetes mellitus.

In view of the failure of previous attempts to establish a practical substitute for insulin, it would be a mistake to wax over-enthusiastic about the findings of research workers in the field of medicine over the past few years, but it can be said that some of the observations made are certainly encouraging. Perhaps the ultimate conquest of diabetes mellitus must depend on a more thorough understanding of carbohydrate metabolism. At present this seems far from being achieved in view of the ill-comprehended parts played by the anterior pituitary, suprarenal cortex and various other active agents in the body.

Meanwhile the disease of diabetes mellitus is controlled—fairly satisfactorily by our standards, miraculously by those of a quarter of a century ago—by injections of the pancreatic extract insulin. Modifications of this substance, and a better understanding of dietary factors, have rendered treatment less exacting to physician and patient. The disease itself is an interesting diathesis, as H. G. Wells might say.

Notes on Peripheral Nerve Injuries

By R. H. Harley, Esq.

TREATMENT OF PERIPHERAL NERVE INJURIES

THE two most important decisions which the surgeon must make are when to operate and how to operate. In many cases operation is never necessary. Careful pre-operative and post-operative routine are of great value.

When to operate.—In civilian injuries when the wound is relatively clean and simple, and when adequate excision can be performed in the first

six or ten hours, primary suture is the method of choice. Primary suture should never be performed if there is the least likelihood of infection supervening, because the suture line will break down and the operation will be a failure, while secondary suture will be less likely to succeed because of the increase in intra-neural fibrosis which will result from the first operation. Primary suture is almost never indicated in war wounds.

Fœrster has shown that the results of secondary suture remain almost constant if it is performed at any time up to six months after the injury. If this interval is exceeded the results deteriorate progressively with increasing time, and Platt says there is little chance of success if the period between accident and secondary suture is three years or more. The causes of the bad results following prolonged delay are as follows :—

1. Degenerative changes are seen in the anterior horn cells, which are probably unable to initiate downgrowth of the axons. Similar changes are also seen in the cells of the posterior root ganglia.

2. Changes occur in the Schwann cells which result in impaired production of neurilemma sheaths.

3. The production of myelin is deficient.

4. The muscles undergo degeneration and fibrosis, so that even if they are subsequently innervated they cannot function. Platt has shown that the extensors of the wrist and fingers retain their response to faradism for at least two years.

It is clear, therefore, that operation should not be delayed for more than six months, but it is desirable to defer operation for five or six months because many spontaneous recoveries will occur during this period, and all sepsis will have disappeared, while the process of regeneration will not have been impaired.

It may therefore be stated that the ideal time to perform secondary suture is six months after the injury, provided no recovery is occurring. The decision may be influenced by the degree of recovery which has taken place, by a study of the electrical reactions, and by a knowledge of the normal rates of recovery of the different functions. It should be noted that the area of anæsthesia contracts about a week after the injury has been received This is due to compensatory overactivity of the surrounding nerves, and is not due to any recovery of the injured nerve. Moreover, trick movements may be acquired and so make the unwary examiner think that motor recovery is occurring.

Pre-operative treatment is of great importance. It aims at preserving the function of the limb, preventing stretching of the paralysed muscles and avoiding the onset of contractures and joint stiffness. It should be directed towards the circulation, the muscles, and the joints, and should be presevered with assiduously during the entire period between injury and operation.

The circulation is maintained by massage and heat in one or other of its forms, such as radiant heat baths. Great care must be taken not to burn the anæsthetic parts. The limb must be protected constantly from cold. Splints should be applied to keep the paralysed muscles relaxed. They should be light and well fitting, especially in the region of the hand. In the early stages electrical stimulation with the galvanic current three times a week will maintain the nutrition of the paralysed muscles. If and when the response to faradism returns the latter should replace galvanism. If voluntary power returns, graduated active exercises take precedence over all other forms of treatment. Occupational therapy by a skilled physiotherapeutist may make the difference between a useful extremity and one which is of little functional value to the patient. All the joints should be put through their full range of movement at least once each day to prevent joint stiffness. Skilled pre-operative and post-operative routine is of great psychological value during weary months of waiting. Physiotherapy should be kept up for at least a year after operation.

Three types of operation are performed in cases of injuries to the peripheral nerves, operations for the restoration of conduction, operations for the relief of pain and other irritative phenomena, and operations designed to restore function in cases of irreparable nerve lesions, or in cases of incomplete recovery. It is with the first of these groups that we shall be especially concerned.

OPERATIONS FOR THE RESTORATION OF CONDUCTION

These types of operations are performed for this purpose :—

1. Resection and suture.
2. Neurolysis.
3. Operations designed to bridge a gap.

The choice between these three will depend upon the findings at operation. The nerve lesion will fall under one of three heads :—

1. Division with a gap.
2. Division without a gap.
3. Intact nerve trunk with or without a local lesion. If there is a gap it must be bridged by one or other of the methods subsequently to be described. If there is division of the nerve without a gap, resection and suture is indicated. If the nerve trunk is intact the surgeon must decide between resection and suture on the one hand and neurolysis on the other.

The changes found at operation will now be discussed in more detail. After division of a nerve neuromata develop on the end of each stump, though that on the proximal one is much larger than that on the distal one. These are termed end neuromata. They are composed of whorls of fibrous tissue and of axons running in all directions. After partial division of a nerve a lateral neuroma may develop. If the nerve has not been divided it is often bound down to surrounding structures by fibrous tissue. When it has been freed from the latter and thoroughly mobilised it should be carefully examined; it may or may not present pathological changes. A normal nerve should have a smooth shiny appearance and a soft and pliable texture. A nerve which appears normal to inspection and palpation may yet be incapable of conduction. Microscopical examination will reveal changes in these cases. A fascicular neuroma may be present. This consists of minute neuromata on the axons at the site of injury. Endoneural fibrosis may occur in the proximal segment without producing any macroscopical changes, and the same is true of ascending toxic neuritis. The latter condition is due to the effects of bacteria or their toxins.

Microscopically the axons are separated by œdema fluid and fibrous tissue, they do not take the stain, and appear as multi-nucleated rods containing here and there droplets of myelin. Conduction should always be tested with an electrode or cathode ray cylinder applied well above the site of injury, because endoneural fibrosis and toxic neuritis can ascend the proximal segment for a considerable distance. On the other hand a fusiform neuroma may be present, or the nerve may feel unduly hard as the result of endoneural fibrosis.

We are now in a position to discuss the indications for neurolysis as opposed to resection and suture.

INDICATIONS FOR NEUROLYSIS

Neurolysis aims at freeing the nerve from scar tissue which compresses it and anchors it, and at replacing it in a healthy bed. This may necessitate transposition. The operation is indicated when the nerve trunk is intact, but is bound down by scar tissue, and when after mobilisation it appears normal to inspection and palpation, and when it can be proved to conduct by stimulation with an electrode or cathode ray cylinder. If these criteria, and especially the last, are not satisfied, neurolysis will fail, and resection and suture should be performed.

Leriche stated that the stripping of a nerve may result in ischæmia, but Cairns does not consider that there is much danger of this occurrence.

RESECTION AND SUTURE

This operation is indicated if the nerve trunk is intact but neurolysis is contra-indicated, or if the nerve is divided yet there is no insuperable gap. In war injuries a gap is present in more than 50 per cent. of cases.

The incision should be very long, in most cases it will involve all or most of the injured segment of the limb. The nerve is exposed, widely mobilised, and examined by inspection and palpation, and, if necessary, with the electrode or cathode ray cylinder. If the nerve is divided the proximal segment is resected by cutting a series of thin sections until normal nerve is exposed. This should be whitish or greyish in colour, and soft in texture.

It is essential that the end neuroma on the proximal stump be completely excised. Two or three millimetres, and no more, should then be resected from the distal stump, following which the two ends are sutured. Two methods of suture are available, stitch suture and fibrin suture. If the former method is employed the sutures should be non-irritating and as fine as possible—fine silk is the most suitable material—and they should not pass through nerve tissue or they will produce endoneural fibrosis at the suture line. Ideally, the sutures should take up only the epineurium. The nerve ends should be approximated just short of contact to avoid distortion.

A Case of Strangulated Inguinal Hernia in a Child of Five Weeks

By John Gordon, Esq.

STRANGULATED inguinal hernia is one of the more common surgical emergencies, but it is in babies that strangulation of a congenital hernia becomes very rare, and it is for that reason that I should like to record the following case.

Terrance, aged five weeks, was the third child of a normal mother aged 26, the first child being stillborn and the second a healthy girl. The patient was a breech delivery and the mother said that a foot was delivered first, but it does not seem

to have been a case of prolapsed leg as an anæsthetic was not given.

The patient and his mother were admitted to Guy's Hospital under Mr. Bromley at noon on August the 21st. He had had no previous illnesses, but at birth his mother had noticed a lump in his right groin which disappeared after a week. At 5 p.m. on the day before admission the child began to scream, and the mother decided to feed it. She found it would not drink, it had always been breast-fed, and she noticed that the lump, which had been present at birth, had reappeared. She took the child to her doctor, who gave it some sedative mixture, and it was then quiet until 3 a.m. the following morning, when it began to get more pain, in which it drew up the right leg, and vomited. The bowels had not been opened since 2 p.m. the previous afternoon, but there had been no trouble with micturition.

On admission the child was very shocked, but did not look wasted or dehydrated; it was getting attacks of colic in which both legs were drawn up, and it was screaming continuously. It was vomiting bile-stained vomit. On examination there was a lump in the right inguinal region which was red, tender, tense, irreducible, and which gave no impulse when the child cried; the right testis was absent, the left being present. The abdomen was distended with visible coils of gut, but there was no visible peristalsis, it was resonant to percussion, and on auscultation increased intestinal sounds were heard. There was no fæces in the rectum.

A diagnosis of strangulated inguinal hernia was made, although in view of the rarity of the condition at that age, and the fact that the right testis was not present, a torsion of the testis was considered.

At operation, under a local anæsthetic, ½ per cent. procaine, the inguinal canal was opened and the absence of the testis confirmed. A very tense hernial sac was found, which was opened and was found to contain about 8 inches of blue ileum, one inch of which was plum-coloured and showed petechial hæmorrhages on its surface. At first mesenteric pulsation was not palpable, but after wrapping the gut in hot towels for about ten minutes, a weak pulsation returned. A tough constriction at the internal inguinal ring was divided, but at that stage of the operation the child began to cry and a general anæsthetic of ethyl chloride and ether was given to enable the intestines to be returned to the peritoneal cavity. No gut resection was attempted, as this procedure in infants has a mortality rate of 100 per cent., and no repair operation was performed to strengthen the inguinal canal.

The child was given 20 ounces of saline via a subcutaneous drip during the first twelve hours following the operation and was then given a breast feed. As it did not vomit, these feeds were repeated three-hourly, and 18 hours after the operation the child passed a motion with some altered blood.

The child continued to feed normally, began to pass the motions as it always had done, and was discharged fit after six days. The wound had become infected owing to its site in the groin, but it was felt that the child would be less likely to run the risk of an intercurrent infection if nursed at home.

My thanks are due to Mr. Bromley for allowing me to publish the details of this case.

Sector News

Guy's Letter

THE last fortnight has seen a great deal of activity at Guy's in all its departments; there has been considerable reorganisation of duties with the result that an ingenious "off-and-on" rota has been devised. By this system one is on duty for two days, during which time one is concerned with all the care and treatment of patients admitted during that period; in the succeeding two days the person "on call" comes on duty in case the work becomes very pressing. Finally there is the off-duty period when one is advised to get away from the Hospital completely and relax.

Sleeping accommodation in the underground shelters has been greatly improved, and in almost every case beds have been provided. If these beds are needed elsewhere and it is still necessary to sleep underground, it is to be hoped that the necessary bunks will have been provided.

The welfare of the students has been a matter of concern during the past few weeks; the majority of junior students have been sent off to the base hospitals, where teaching and laboratory instruction have been organised. While the very senior students who are taking final examinations, have been sent off to places of quiet to carry on with their revision work, the remainder of the students have been divided into teams to carry on with the work of the Hospital; provision has been made for their teaching and adequate quarters for rest and study during the evenings have been arranged.

Mr. McCall has recovered from his illness and we are anticipating his return to us with pleasure. Mr. Davies is making an uncomplicated recovery after his unfortunate accident, and we trust and hope that one day he will be able to repay his debt to the enemy. Sister Imray is now convalescing in the Eye Ward after an operation; her presence there does much to brighten the atmosphere.

B. L.

Anniversary Pembury Letter

SINCE October 4th, 1939, the "Pembury Letter" has appeared regularly, describing to the best of our ability the happenings in this part of Kent. Now on the occasion of our anniversary we are inclined to view the scene in retrospect. Any opinions we express must, of course, be understood to be entirely our own.

Of the original fifteen Guy's staff sent to Pembury, only five are still here. This fact, when analysed, reveals some interesting things. First we must go back to the original scheme of Sector 10, when it will be found that Pembury was classed as the base hospital. We can say at once that it has never filled that position. The explanation is not difficult to find. Firstly, the war started very differently from what had been expected, and there were no casualties to evacuate. Secondly, the civilian sick in London showed no great inclination to be sent into the country. When these two facts became apparent, there was a general tendency for the medical profession (and all others for that matter) to gravitate back to London and carry on "with business as usual." This almost led to the closing of Pembury as an E.M.S. hospital, but fortunately it never came to pass. We have carried on dealing with the not inconsiderable local sick, augmented by small convoys from Guy's and large ones from Dunkirk, Dover and other places. From this it may be gathered that the past year has been one of varying phases of activity, with the hectic days of Dunkirk at one extreme to the almost complete evacuation of all cases on two different occasions at the other. This very briefly describes the functions of Pembury during the past year.

Now let us consider the E.M.S., at least as far as it has worked locally. We feel it has been a success, and, broadly speaking, it has managed to deal with the situation in all our varying phases of activity. It would be idle to suggest that all has been perfect, but the scheme has worked far more smoothly than many had prognosticated. What conditions will govern the future of the E.M.S. have not yet been promulgated, but we believe the varying and often conflicting claims of the profession have been sympathetically and generously dealt with during the past year. It was certainly very different from what we had been led to expect from State control. We cannot close, however, without saying that much of the success has been due to the charm and tact of Dr. Grasby and Dr. MacFadyen of the Pembury staff, and to the extraordinary kindness of the senior members of the Guy's staff towards those of us who are so much their juniors.

Next we must tread on dangerous ground, but as in the past we have not shunned the risk, we do not intend to do so now. Our remarks concern the fact that the hospital is part of both the E.M.S. and the K.C.C. In our opinion this has not been a success. It is not our job to say which we believe to be responsible, and the answer is probably neither, but the fact remains that one cannot serve two masters. Once before we appealed for unified command, and, though it has not come to pass, we still believe it to be a primary essential. In our opinion one of the defects of so many county hospitals is the habit of combining Public Assistance and Public Health in the same institution. This invariably leads to the senile, destitute and homeless being accommodated in wards intended for the sick, and *vice versa*. In a previous letter we gave one example of this, and now we can state that there are over twenty children in our wards who have no pretence of being ill. We are well aware that there are excellent reasons for this at the present time, but we are equally emphatic that it merely represents an exacerbation of what has gone on for the past year. Anyone with the most rudimentary knowledge of pædiatrics will realise that this state of affairs represents the worst kind of medicine.

With regard to the question of supply there have also been difficulties. For example, the Children's Hospital is short of clothes (desperately so) and the Maternity Department is short of napkins. This final fact, however, is so amazing that, were it not true, we should refuse to believe it. In the Children's Hospital a week's soap ration, which has to be *shared* between two wards of over twenty children each, consists of one half-bar of yellow household soap, and one tablet of toilet soap. This is apparently supposed to cover the washing of the ward, equipment and children, as well as the needs of doctors and nurses! Strangely enough, at another hospital in the Sector one children's ward gets six tablets of toilet soap.

One other phenomenon we should like to reveal, and that is that the food supplied to the patients leaves much (some might say everything) to be desired. We understand, too, that the nurses'

dietary is not of such a nature as to send them into raptures.

We publish these facts because a year's experience has shown us that Pembury has a good and healthy body, but it is marred by some festering sores. We hope these remarks may fall upon the ears of those who can rectify the errors. They have always done so in the past, with highly satisfactory results.

And now, having discussed the past, we would like to be able to peep at the future, but that cannot be. However, having very recently inspected the stair well of Hunt's House, we can think of no more appropriate words with which to close this letter than those we used to end the first " Pembury Letter " a year ago :—

Dare quam accipere.

N. M. J.

Farnborough Letter

APART from the war, which is still passing us by, though at times rather closely, the chief topic during the last fortnight has been an indiscretion by a large number of nurses. This took them one night to one of the more dangerous spots in the neighbourhood for what was a most enjoyable evening, but which, next morning, brought down upon them the wrath of those with whom their spiritual and physical well-being is entrusted. A new rule, imposing an early curfew, had been flouted with the proverbial contempt of youth for the law, but without the attendant luck on which it relies. Whilst fading memories of similar excursions of our own impel a secret sympathy with these miscreants, we are well aware that such episodes must not recur. With this in mind, we would suggest that measures be taken similar to those in other irresponsible communities and that proctors be elected who, with their attendant " bulldogs " (or feminine equivalents) might keep watch over their untrustworthy charges.

It is with mixed feelings that we send Sister Samuels our sincere good wishes on the occasion of her marriage. The knowledge that " Sammy " was not returning to us after her wedding came as a sudden and bitter blow to everyone here. Such a capable sister and charming person will be greatly missed.

G. L. L. R.

Joyce Green Letter

DURING the last few weeks a radical change has swept the horizon at Joyce Green. Whereas in August we were accustomed, during our morning round, to stopping and admiring the various flowers and shrubbery with which the grounds abound, in September we find ourselves stopping in order to prevent ourselves from falling into the latest bomb crater which has made its appearance overnight. At the time of writing our score is 22 high-explosive and 8 incendiary bombs—taking Joyce Green and the Orchard together. Fortunately little material damage has been done, and we have had no casualties ; the Orchard Hospital was evacuated a few days before it had a direct hit on one of its air-raid shelters. At the moment, the chief annoyance is an unexploded bomb which has fallen near the main gate and caused the evacuation of the telephone exchange to the superintendent's office ; this is somewhat disconcerting—and sometimes embarrassing—to certain members of the staff who appear to have large circles of mixed acquaintances in town, and it also entails a large detour in order to leave the hospital. One of the happy results of the bombardment has been the exceedingly rapid improvement in the condition of our functional patients—24 hours' stay here results in a complete cure.

We welcome our new recruit Mr. Hamilton, who has quickly sunk into the routine, although his arrival must have been noisier than he could have expected.

A. M. H.

Correspondence

The Future of Medicine

To the Editor of the GAZETTE

SIR,—Recent articles in the *Gazette* show that interest in the future of medicine is not entirely dead, while a draft memorandum issued by the Medical Practitioners' Union on Home Treatment Service justifies Mr. T. B. Layton in his opinion that the danger of State Medicine is real.

The Emergency Medical Service has now been in full swing for just over a year, and the Medical Profession has thus had ample opportunity of forming an opinion on bureaucratic control. The consensus of opinion seems to be that this experience has not been a happy one. In spite of this the threat of full bureaucratic control being assumed is still regarded by the profession as being unworthy of serious attention.

Post-war changes will be far reaching and will undoubtedly affect medicine as profoundly as anything else. Surely medicine is too fine a thing

to suffer as it has suffered during the past year. Furthermore, investigation reveals that the history of this suffering extends over a much longer period. " Physician, heal thyself ! " is an injunction which can no longer be ignored.

In his recent rejoinder Mr. Layton mentions the preparation of a brief. Now at law and in medicine the brief is prepared by a clerk for submission to a higher authority as the basis for future discussion. It is as a humble ward clerk, and claiming that licence which is so readily accorded by all other members of the firm, that I submit the following case history for open discussion.

Yours, etc.,
ALAN MARSH.

Winton,
36, Croydon Road,
Beckenham.

A CLINICAL CASE

For Investigation, Diagnosis and Treatment.

Name.—The Medical Profession. *Æt.*—Many thousand years.

C/o.—The profession complains of apathy, listlessness and loss of prestige. He is most anxious about his future and has a powerful presentiment of impending doom.

H.P.C.—On September 3rd of last year (1939) the profession fell a victim to the prevailing infection. This condition was rapidly complicated by a raw deal from the Ministry of Health, and for a short time the patient was profoundly shocked. As the condition progressed it became obvious that it was running an atypical course, and that the severe symptoms, described by Goering, Goebbels and others, which were expected immediately, would in all probability not become manifest until the following spring or summer. After three months the complicating condition was to some extent modified and the profession was left in its present state of apathy and listlessness with a presentiment of impending doom.

P.D.I.—There is a long history of raw deals dating from 1912 which can all be traced to mismanagement and neglect on the part of those responsible for the care and well-being of the profession, and to a chronic condition of apathy with lack of unity and cohesion on the part of the profession itself. In 1914 an epidemic similar to that now being experienced claimed the profession as a victim. This illness lasted four years, and the period of recovery, which was spread over some twenty years, suffered numerous interruptions to convalescence through slumps, raw deals and, most serious of all, a steady erosion and infiltration of various parts by new growths of undoubted malignancy.

F.H.—Two most important facts are revealed by a consideration of family history. Both traditional, they exert a profound psychological effect. Firstly the profession finds itself forever in conflict with the powerful traditions of mumbo-jumbo, occultism, fetishism, Christian Science, osteopathy, cheiropraxy and the supernatural generally. Secondly there is the tradition of Hippocratic Philanthropy out of which an economic conflict has arisen. This conflict is probably the root from which spring all the ills the profession is now heir to.

P.C.—On inspection, the patient is apparently in fair health, with every evidence of vitality and a strong and powerful constitution. Superficially he appears to be well nourished, but further examination reveals functional defects and flaws in the integration of personality of grave import. He refuses to co-operate in discussion of his symptoms. His gait shows a marked degree of incoordination, which is probably due to his inability to see where he is going.

GENERAL PRACTITIONER SYSTEM

The entire profession is built upon this system, and in it will be found a wealth of clinical material. Its normal range is from the exclusive West End practice, combining minimum of material with maximum of fee, to the drudgery of a large club and panel practice in a depressed industrial area. The mean appears to lie between the limits of a good middle-class practice with no panel or dispensing at one extreme and a similar type of practice with a panel of about a thousand and dispensing done at the surgery. Investigation, however, reveals pathological changes taking place. They are functional and organic.

1. Psychological in origin and arising out of the tradition of Hippocratic Philanthropy referred to above. This tradition insists that no remuneration shall be expected or received for much of the work done by every member of the profession. The risk of being imposed upon must be, and is, taken willingly. But there seems to be no provision at all for those patients who are not eligible or do not care to accept this charity, and who, when in need of advice and attention, either go without or embarrass themselves financially. Out of this conflict grows a financial barrier between patient and doctor. This barrier is most readily demonstrated at times of national crisis such as the present, when, in spite of there being much sickness prevalent in the community, the profession remains slack. Moreover, it has been a prominent symptom in every slump period of the past two decades. It is also the impulse which activates the patient who wanders from one member of the

profession to another owing each his fee as he goes, or, as demonstrated above, it may inhibit the seeking of advice far beyond the optimum time. The existence of such a barrier is not in accordance with the spirit of the Hippocratic Oath, and is a grave indictment of the profession as a whole.

The following report demonstrates a classical example of the financial barrier :—

Letter received from patient pressed for fees :—

" . . . It may interest you to know that both my wife and I have been ill on many occasions since your last visit without receiving any medical attention, as the worry of your account has always been in our minds.

" No doubt there are a great many other people who have to do likewise, but it seems a pity that young people are not able to live in decent circumstances and obtain the benefit of medical attention without jeopardising themselves financially."

2. The same tradition acts as a deterrent to the ablest brains entering the profession, which is to be congratulated upon never having attracted the greedy fortune-hunter, but in these days of overwhelming expenses, appearances to be kept up, families to be provided for and old age to be made secure, there is some excuse for seeking security in less noble fields.

3. In the H.P.D. mention was made of various raw deals and new growths. In 1912 the National Health Insurance Act came into being. It was certainly new growth, but was it malignant or benign? It broke down the barrier referred to above for a vast section of the community, but while it gave with one hand it took with the other. The remuneration which the profession was forced to accept by its guardians for this remarkable and unique twenty-four-hour-a-day medical service was roughly nine shillings per annum, which is probably considerably short of the weekly budget of the average insured person for beer and cigarettes. What prostitution of a noble art! What slavery on the hills of Wales, Mr. Lloyd George!

4. With its resistance lowered by the National Health Insurance Act and the long illness of 1914–1918 the profession fell an easy prey to all manner of virulent conditions in the following two decades. The H.S.A., with consequent extension and enlargement of out-patient departments, the County Tuberculosis schemes, the Municipal Infant Welfare and Maternity Clinics, the Public Health Services, Public Medical Services, Dispensaries, Clubs, Friendly Societies and a host of similar aids to medicine began their slow insidious infiltration. How much is now left to that good middle-class practice? What will be taken from it during the next decade?

5. A process of degeneration can also be demonstrated. The busy general practitioner finds himself slowly but surely becoming the slave to his profession instead of the maestro practising his art, which gradually begins to desert him. With fierce and, regretfully be it said, at times unscrupulous competition on all sides he can no longer afford the time or money for refresher courses; his reading is confined to the druggist's circulars; his clinical lectures are delivered by their travellers. He begins to lose touch with his colleagues as well as with his art. With the rapid decay in the spirit of the old medical societies he never meets or becomes really acquainted with the new men coming in to the district even if they remember to pay their call on him. He resents their presence and regards them as pariahs, suspicious of their ethics, ability, morals, manners and breeding. Young and enthusiastic squatters appear; his practice drifts away, and he retires a shabby, disillusioned, ignorant old man.

CONSULTANT AND SPECIALIST SYSTEM

This system is the most delicately balanced and the most abused in the whole profession. Its development is long and arduous. The attainment of consultant rank is conditioned not only by ability but also by having the means through which to endure the long period of apprenticeship. Once established, the consultant is dependent on those general practitioners who remember him and live near enough to him to seek his advice. He is the victim of the most gigantic racket of modern times —the Harley Street address. Not to live in this area is to the consultant what not to be seen at Glyndebourne is to the *socialite*. The rents are fantastic and the congestion is akin to hepatisation.

There are also those who, in spite of being Members and Masters and Fellows, nevertheless fail to land the coveted appointment. They drift into the provinces if they are lucky, or into the smaller institutions, or, as sadly disillusioned men, into general practice.

The pathological changes observed in this system are similar to those described above. The tradition of Hippocratic Philanthropy is very powerful, and the resultant financial barrier is well defined. It can be demonstrated, particularly during slumps and international crises, by the dramatic fall in private practice with a compensatory rise in out-patient attendances. This system has not shown itself very susceptible to raw deals in the past, but it seems to have suffered considerable damage in the present attack, and it is probable that its function may be permanently impaired.

DIAGNOSIS

The condition is due to an acute infection by the virus of Hitler. There is also a psychogenic condition present of long standing and extremely

complex in character. The symptoms suggest an imminent disintegration of the personality, of such gravity as to threaten the continued existence of the patient.

PROGNOSIS

Reprinted from the "Medical Press and Circular, 16-3-38.)

The advances made in medical science, which have made preventive medicine a practical science and the general trend of legislation in recent years, point to the conclusion that the time is not far distant when some form of State medical service is likely to be established. There is little doubt that there is a body of opinion in the profession which supports this view and advocates the introduction of State medical service. It is difficult to assess how widely this view is held or how much active support there is for such a scheme. The claims made for a State medical service are that the work would be better organised, and so give more leisure and time for reading and refresher courses and regular holidays. It is also presumed that there would be a pension on retirement. These claims, theoretically, are true and unanswerable. On the other hand, the organisation would be imposed and no longer to a great extent in the hands of the practitioners themselves. The rate of remuneration would no longer depend on the efforts of the individual, but would be fixed. There is no reason to suppose or evidence to support the idea that remuneration would on the average be higher than at present. Nor are the average rates of pension from other Government services on a scale to offer much compensation for an average lowered income. For practitioners who are already established there is the question of how they are to be compensated for a practice which they have already bought, and even possibly in some cases borrowed money to acquire. Many of the advantages claimed for a State medical service have been obtained already by practitioners in partnership, who together cover an area, and these have been gained without loss of personal liberty. There is an inevitable loss of liberty under any form of State medical service as medicine in this country has essentially been developed by individual efforts and under voluntary schemes ; thus loss of liberty is an important factor. The average practitioner has enjoyed almost complete personal liberty and is an individualist. This outlook is not likely to make him take blindly to State control, and experience proves that this is true of large numbers of practitioners.

When the Insurance Act was introduced it was in opposition to a large body of medical opinion, and it was presumed to be the first step to some form of State medical service. This controversy is now old history, but it clearly shows how a scheme which was opposed widely can be imposed on the profession. The situation is no different to-day, and history might well repeat itself with results far less favourable to the future of medicine. The great danger of the present position is that public health measures and municipal schemes hav encroached on general practice, and if some form of State medicine is grafted on to these it will be organised not by the profession but by some municipal scheme. The profession is no better organised or disciplined to resist such a scheme than it was when the Insurance Act was established, and the results might be far-reaching.

Co-operation is the paramount need to-day, both in general practice and all branches of the profession. Specialisation has increased and is tending more and more to divide the profession into groups, which up to now has tended more towards separation than co-operation. The solution should come from within the profession by some carefully formulated scheme which would meet with general acceptance.

TREATMENT

The consideration of treatment is epitomised in the ultimate sentence of the prognosis. "The solution should come from within the profession by some carefully formulated scheme which would meet with general acceptance." Its aims, therefore, must be :—

1. The removal of the financial barrier.
2. To secure a greater degree of unity and cohesion in the profession.
3. To retain and maintain complete control of the administration of the profession and a close liaison with the Ministry of Health.

State medicine can never fulfil these aims, but the B.M.A. Scheme (D23) provides a nucleus from which the perfect scheme might well be evolved. Such a scheme would be based on contract practice administered by general practitioner, consultant and specialist, for the family as a whole and open to all classes of the community.

The scheme would be administered locally by the medical societies with the Medical Officer of Health acting as liasion officer between the society and the Ministry of Health, and with the Health Office doing the donkey work. Centrally the administration would be undertaken by one or more representatives from each society and one Medical Officer of Health.

Attached to the societies would be teams of consultants and specialists, each member servin several societies. Clinics would appear, from one to another of which the consultants would peregrinate like barristers on circuit. These clinics would absorb the old-fashioned nursing home and

probably in time the surgery-in-the-house of past and present day medicine as well. Here patient and doctor alike would enjoy all the amenities and none of the discomforts of a visit to a teaching hospital, or the Harley Street area, with its subsequent meanderings of a battledore and shuttlecock nature in search of further investigation.

The finance of the scheme is extremely simple. Those services which are at present rendered by the general practitioner for the usual visiting or consultation fee would be covered by a fixed quarterly payment including the whole family. Such quarterly payment to vary according to the fees now charged and to be arrived at by mutual agreement between patient and doctor. The amount would range from a minimum of one guinea per quarter per family upwards. The payments would be made into the society's general practice fund and distributed by the treasurer. The finer details of the financial arrangements may be left to a later stage in the discussion.

The consultant service would be financed on similar lines. The yearly payment in each case would equal one quarterly payment to the general practitioner fund. The ideal method of distribution to the members of this service is debatable. Perhaps it would be the payment of a retainer to each member of the team with modified consultation and surgical fees in addition. This fund would also provide for the endowment of the Clinic.

The first objection to such a scheme is that the amount of work would increase enormously. To a certain extent this is true, but surely the answer is that it is there waiting to be done now. As things are, the profession is failing in its primary duty in that there are those, by no means only in the poorer classes, who would seek relief from their sufferings could they afford it.

If the scheme means an increase in work it also means a considerable increase in revenue to the practitioner who will thus be able to employ assistance. In this way the squatter will be eliminated while the large partnership will tend to increase to the greater good of medicine.

The second objection is that the increased revenue will not be permitted. By whom will it not be permitted? If the control of the profession lies in its own hands this question need not arise.

The third objection is to bringing the Medical Officers of Health, the health offices and the Ministry into the scheme. Surely to exclude them would be rank stupidity. In what other way could the harmonious co-operation of the Ministr be obtained? Is this not the surest way of nipping in the bud any attempt at further encroachments and raw deals?

The fourth objection is that the public do not want any such scheme. The answer is contained in the following letter :—

" Dear Doctor,

" Now that your contract scheme has been running for some time, I thought that you might like to have the views of a patient on the subject in the light of twelve months' experience.

" As you know I have always been a keen advocate of such a scheme, and I am not alone in this respect as is shown by the large number of people amongst my friends and colleagues who have informed me that they also would welcome such a scheme if it were available.

" If the scheme could be extended and given publicity I feel sure it would achieve success, especially among men such as bank and insurance officials and Civil Servants. These men have regular but not very large incomes and usually they have growing families to provide for.

" This means that illness of any kind is always a double anxiety—that of the illness itself and the worry of how the bills are to be met. Obviously a scheme such as yours eliminates the financial worry and has the important additional advantage that when the question of ' calling in the doctor ' arises the only consideration is the welfare of the sick member of the family.

" Another advantage which appeals very strongly to me is that when a member of the family needs medical attention there is usually an accumulation of small difficulties, chiefly concerning the children, which in themselves are not worth a special consultation, but are apt to worry parents and can easily be settled when the doctor calls.

" In short, parents need not wait until their mistakes in diet and training have irrevocably impaired their children's health, but can get (immediate) advice on how to keep them healthy.

" I sincerely hope your scheme will have the success it deserves, and that in time it will spread throughout the country, as I think it would fill a big gap in the Medical Services.

" I am,

" Yours truly,

" (Signed) H. E. HUTTON."

So much for the advantages to the patient. What of the medical man? His advantages are manifold. The more important are :—

1. He will know exactly who is his patient and who is not.

2. He will be able to visit or send for his patient whenever he wishes to do so.

3. He will have the opportunity to prolong treatment to its logical and desired conclusion without hearing that oft-repeated phrase, " I will see how I get on now, doctor."

4. He will be able to practise preventive medicine to his own and his patient's advantage.

5. He will gain a certain increase in revenue.

6. He will be able to limit his practice at his own discretion.

7. Most of the drudgery and expense of book-keeping will be taken from him.

8. His practice will gain a great deal as a saleable asset.

9. Constant intercourse with his colleagues at the Clinic will eliminate rustiness, and all those outspoken comments made in paragraph 5 of the General Practitioner System.

The profession, too, will find many advantages. Its prestige would be enhanced by unity and cohesion, which in themselves would enable it to built up effective resistance to raw deals. The vexed question of the capitation fee, which for years has resisted all efforts to raise it, would at last be brought to its final judgment. Another skeleton in the professional cupboard is the squatter. He may never be entirely eliminated, but the scheme would go far towards suppressing him. Since the provision of medicines, etc., are not included in the scheme, dispensing would return to its rightful home, the chemist's shop. This would very largely rid the community of the patent medicine racket.

The Clinic, with its consequent intermingling of all professional members, would do much to improve the relationship between the members themselves and between the various sections of the profession. Each would come to know the other better and would learn something of one another's difficulties. The freemasonry of the teaching hospital would extend into practice where for so long it has been most conspicuous by its absence.

Guy's Treasures

To the Editor of the GAZETTE

SIR,—If a little late, the tragedy of Hunt's House cries a warning. We cannot tell, we dare not guess, how much of the Hospital will share its fate before the war is over. But one thing is certain. No effort must be spared to save the Hospital's treasures and antiquities, on which, until they were threatened, we set all too little store. Though the spirit of Guy's be immortal, if nought remain of her body, medicine will be the poorer.

Thereby comes a plea. Parts of England are safe still. To them send the exhibits of the Museum of Guy's Antiquities with the personal relics of Thomas Guy and William Hunt. Send the oldest and rarest books in the Wills Library; send Joseph Towne's incomparable wax dissections; and not less particularly, because of the work entailed, send the portraits of the venerable and illustrious sons of Guy's who adorn the Court Room staircase. Send all these along with the records of the Hospital and the clubs.

Some have gone, we hope; many have not, we know. If labour seems lacking, it may be had for the asking from those who pass their time within these walls.

Money can replace the latest and most expensive X-ray apparatus; other things are priceless.

So let the task be done with zeal.

Yours, etc.,

RAYMOND T. HINDE.

Guy's Hospital,
S.E.1.

Hospital Information, etc.

Notice

The following volumes of the *Guyoscope* for sale :—

Vol.I, No. 4, April 7th, 1897.
Vol. I, No. 9, October 29th, 1897.
Vol. II, No. 15, May, 1898.

Write The Manager, *Guy's Hospital Gazette.*

Changes of Address

I. G. Robin, M.B., B.Ch., 77, Marlborough Mansions, Cannon Hill, N.W.6 (residential), and 66, Harley Street, W.1.

J. W. S. Harvey, F/O, R.A.F. (V.R.), Lloyds Bank, Cox & King's Branch, 6, Pall Mall, S.W.1.

W. E. Waite, Surg.-Lt. (D.), R.N.V.R., c/o The Admiralty, S.W.1.

Norman Barber, L.D.S., R.C.S., 69, Wimpole Street, W.1. *Welbeck* 9373.

Prisoner of War

Missing since May, reported Prisoner of War.—Capt. F. B. Lake, R.A.M.C., Camp Oflag. VII C/H, Germany.

Births

ELLIOTT.—On September 15th, 1940, at the Radcliffe Maternity Home, Oxford, to Bets, wife of John Elliott, Captain, R.A.M.C.—a son (Michael John).

PARROTT.—On September 19th, 1940, at Wintrath, Winscombe, Somerset, to Cecily (née Redfern), wife of A. Edwin Parrott—a son.

Marriage

HARVEY—PHELPS.—On September 7th, 1940, at Altrincham, Cheshire, Warren Harvey, Flying Officer, R.A.F. (V.R.), son of Dr. R. Simpson Harvey and the late Mrs. Harvey, of London, to Sheelagh, daughter of the Rev. G. L. and Mrs. Phelps, of Altrincham.

Death

GILLBARD.—On September 27th, 1940, at Golders Green, Richard Gillbard, M.R.C.S., L.R.C.P.

EDS. { N.A.N. / B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

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PASSIM

IT has been customary in the past to devote this number of the *Gazette* to a welcome to the new students at the opening of the Medical School year. An attempt was made to explain in detail the working of each of the departments of the School and of the Hospital. The student was led to understand both what was required of him and also what benefits he could hope to gain from each of his various appointments. This year however, the Medical School year was commenced in August, so that such an introduction is now no longer necessary. The present organisation and distribution of the Medical School has already been described in detail in these pages. The pre-clinical subjects are studied at Sherwood Park, near Tunbridge Wells, in an atmosphere of comparative peace and quiet; the pre-clinical class itself is held at Pembury. The different clinical appointments have been distributed throughout Guy's and the base hospitals of Farnborough, Orpington and Pembury, in order that the fullest possible use may be made of the in-patient and out-patient material that is available. At Guy's itself, out-patients form the main basis of teaching, both in the medical, the surgical and the special departments, but there is some opportunity also for medical and surgical ward-clerking and dressing. The Front Surgery is as busy as ever; the Gordon Museum and Wills Library still afford ample opportunities for the study of the more theoretical aspects of medicine, for reading and for the study of morbid anatomy. Clinical lectures and revision classes continue so far as is practicable, but practical work still remains the spearhead of our teaching. Clinical laboratory and microscopical facilities for simple investigations are not so easily available for the individual use of the ward clerk. This is not totally disadvantageous in so far as it throws greater stress upon careful history taking and accuracy in the determination of physical signs. Those investigations that are essential can be all the more easily seeded out when recourse has to be made to a busy technical staff for their performance. The clinical material that the student encounters in the wards can be no longer so carefully selected for its teaching value, and a truer perspective is obtained of the relative frequency of the more interesting pathological states, and also of the amount of disability that results from the simpler and commoner conditions. A great responsibility is thrust upon the junior staff and registrars, who must help, to the utmost possible degree, the student to concentrate upon and work under conditions that are extremely difficult.

In devoting this special number of the *Gazette* to reviews of medical books, it is not intended to suggest that the present obstacles which confront the student can be solved by a more extensive application to book learning. At the same time, one of the most valuable lessons that can be learned from the pre-clinical class is the habit of reading up each night the cases that have been seen during the day. "Blind" reading of a book or periodical is useless, whilst cramming for examinations becomes unnecessary if intelligent use of both text books and library is made in this way. The study of medicine and surgery becomes many more times as interesting and, in a short while, is greatly simplified. Air-raid shelters and disturbed nights are not conducive to study, and if reading under these conditions is to be instructive, then it must first be engrossing. The hospital is already under debt to its students on account of their voluntary and very willing services in the stretcher parties, theatre teams and resuscitation wards; the best way in which this debt can be repaid is in the maintenance of as high a standard of clinical

teaching as is possible and in the encouragement at every step to learn as many lessons as possible from the material that is available.

All that is most distinctive in current Guy's teaching is to be found in the *Guy's Hospital Reports*, which contains articles written for the most part by members of the Hospital Staff. The unqualified man has the special privilege of purchase at a much reduced price, an advantage that he will be wise not to neglect.

A great number of publishers are responsible for medical books, and a just estimation of the rival claims for their various productions is quite beyond the scope of this article. Mr. Humphrey Milford at the Oxford University Press offers a wide range of medical works of uniform excellence in subject matter, binding and printing. Messrs. J. & A. Churchill publish Taylor's " Medicine," edited by Dr. Poulton, Romanis and Mitchiner, the *Recent Advances Series*, and many other well-known works. E. & S. Livingstone, of Edinburgh, publish books containing the valuable teaching that emanates from both sides of the Tweed. Many splendid books are published by Baillière, Tindall & Cox, John Bale, Son & Staples, Ltd., Cassell & Co., Ltd., Edward Arnold & Co., Ltd., and John Wright & Sons, Ltd., while H. K. Lewis & Co., of Gower Street, sponsors a number of books in nearly every branch of medicine. Messrs. Lewis also run an excellent medical circulating library, familiar to generations of medical students, which should prove invaluable to the man who wishes to dip briefly into all the latest books. This is assisted by reference to their catalogues. Messrs. Foyle, of Charing Cross Road, specialise in second-hand books.

Mr. H. H. Grattan, in the Borough High Street, is able to supply most of the books in common demand over the counter; any others he can be relied upon to obtain as quickly as possible.

THE disproportionately heavy damage suffered by hospitals in and around London continues to be a distressing feature of the air attack: this may result singly from their size as individual buildings, or it may be part of the enemy's plan to dislocate the health services, to add to the miseries and so spread discontent amongst those who have been injured. If this is so, then the results must have been very discouraging to him. Not only have the individual hospital staffs shown great promptitude and determination in ensuring the safety of their patients and in treating the air raid victims as they arrive, but also the emergency organisation, that has promoted such full co-operation of services between the voluntary hospitals, the county council hospitals and the public assistance hospitals, has allowed the necessary evacuation and redistribution of cases so as to ensure that in any given area, there are always sufficient beds to deal with any emergency. The out-patients departments continue to serve in a consultant capacity, and a closer liaison with the general practitioner has permitted much attention to be given at home that would previously have called for in-patient treatment. The medical problems likely to arise from the present overcrowding in tubes and underground shelters are still under energetic consideration: the care and rehousing of homeless people and the extension of emergency rest and feeding centres are all matters of great importance to public health and will become of even greater interest to the hospitals as winter approaches. The threats of epidemic have not yet arrived, but the value of prophylactic injections against typhoid has already received prominence in the daily press: active immunisation against diphtheria for school children is of generally accepted value and should similarly be advertised on as wide a scale as possible. Similarly the existing highly organised system for the collection of blood and plasma could be further extended to the collection of measles convalescent serum and its use on a large scale, should the occasion arise this winter. A variety of well proven chemotherapeutic drugs are now available for the treatment of venereal diseases, cerebro-spinal fever, pneumonia and the streptococcal complications of influenza; the emphasis must now be laid upon early diagnosis and prompt treatment, in order to ensure that none of these conditions should assume monumental proportions this winter.

Injuries of the Face

A Clinical Lecture delivered at Guy's Hospital by Nils L. Eckhoff, Esq., M.S.

GENTLEMEN,—Injuries of the face occur both in civilian life and in war time, though the number of war injuries is not so great as might at first be imagined. The tin hat unquestionably reduces the number of injuries from falling missiles, and I am able to show you a photograph of such a hat (Fig. 1) severely indented in front, the patient escaping with no

more than a superficial wound and a minor fracture of the jaw in the region of the symphysis. Steps are being taken to protect the side of the face from horizontal missiles, whilst upwardly directed missiles will almost certainly kill the patient. On the other hand, injuries in civilian

Fig. 1
Showing tin hat with extent of wound on chin.

life are becoming much more common from motor accidents where the face strikes with much violence against the steering-wheel, dashboard or windscreen. I propose to deal with these two big classes of injury together, and as you have doubtless heard a great deal about gunshot wounds generally I shall only mention such special details as concern the face.

FRACTURES OF THE MANDIBLE

These may occur from the causes above-mentioned or from a simple blow. We recently had a patient in Mary Ward who suffered a fracture on the left side in the region of the mental foramen and one on the right side in the region of the condyle from a chance blow when passing a street brawl. In a review of 100 cases, Ivy and Curtis found that 68 were single, 31 double and one triple. It is very important to note that one-third of the cases have more than one fracture, and therefore to secure X-ray pictures of the whole of both sides of the mandible to confirm or exclude this in all cases. Of the 68 single fractures 30 occurred at the angle, 21 in the region of the mental foramen, 6 at the symphysis, 6 in the molar region and 5 in the region of the neck of the condyle. Of the 31 double fractures 24 involved the region of the mental foramen and the opposite angle, 2 the region of the mental foramen and the angle of the same side, 2 the angle and the symphysis, 1 the mental foramen and the condyle of the same side, 1 the angle and the condyle of the opposite side, and 1 the mental foramen of both sides. You will see that the majority occur in the region of the mental foramen or at the angle.

The diagnosis depends upon the history of injury followed by deformity (which varies in different regions) and unnatural mobility. To these are added the usual signs of fracture, namely pain, tenderness, swelling, loss of function and crepitus, and certain special signs, such as laceration of the gum, discoloration both inside and outside the mouth, salivation and not infrequently numbness in the region of the symphysis.

In the presence of one or all of these signs an X-ray picture must at once be taken, and I need hardly point out that a special technique is required to produce pictures that are of any value, and that the condylar region is especially difficult to reveal. Simple anteroposterior and lateral views are usually valueless. Some special knowledge is also necessary in the interpretation of these pictures, for, owing to the obliquity required to throw the mandible clear of the rest of the face, distortion is more in evidence than in anteroposterior and lateral pictures of limbs. Graham Hodgson (1936) has produced an excellent article on the radiology of facial bone fractures. Further information can be obtained from Ivy and Curtis's book on Fractures of the Jaws (1938) and from the paper by Dorothy Marsh (1933).

The deformity is most readily appreciated by studying the line of the teeth, which is interrupted if the fracture is in the anterior part of the mouth (Fig. 2). In posterior fractures the occlusion of the lower jaw with the upper is upset, and this is readily detected if the normal occlusion is known. The incisors of the lower jaw normally come into contact with the posterior aspect of the incisors of the upper jaw, and the lateral or buccal cusps of the pre-molars and molars of the mandible articulate with the groove between the cusps of the upper jaw. In other words the set of the arch of the lower jaw is inside that of the upper.

The displacement is largely governed by the pull of muscles attached to the fragments. Thus in a fracture through the symphysis the lower

borders of the two halves of the jaw are pulled medially and slightly downwards by the mylohyoid muscles, and the fragments separate at the upper end of the fracture line. In fractures through the mental foramen and in the molar region the smaller fragment is pulled upwards and medially by the temporal and pterygoid muscles while the larger fragment is depressed and pulled towards the side

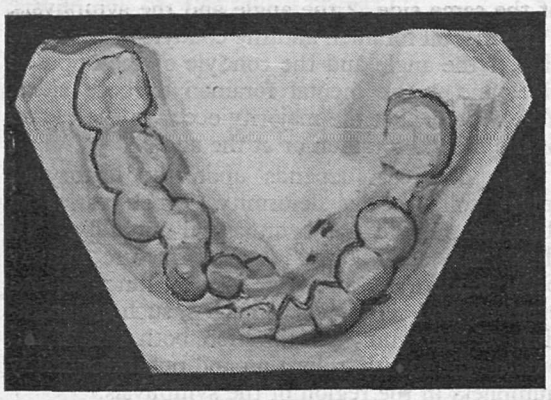

Fig. 2
Showing deformity in anterior fracture.

of the fracture by the action of the mylohyoid and genial muscles. In fractures through the angle the smaller fragment is pulled upwards and medially, and the larger fragment deviates towards the side of the fracture. In fractures through the ascending ramus there is little displacement, while in fractures through the neck of the bone the condyle may be displaced or dislocated by the force of the injury, or pulled forwards by the external pterygoid, and on opening the mouth the jaw deviates towards the side of the fracture. In double fractures there is great danger in that the middle fragment may drop or be pulled downwards and backwards and seriously interfere with respiration, even leading to suffocation. For this reason such patients should be kept sitting up or lying on the face, but never lying on the back.

TREATMENT

The treatment of fractures of the lower jaw is nowadays almost entirely in the hands of the dental surgeons, who have demonstrated what wonderful results can be obtained, but as it may fall to the lot of any one of us to find a patient with a fracture of the jaw in association with other injuries, it is only right that we should know the general principles underlying the treatment and take steps to get the patient seen by a dental surgeon at the earliest possible moment. Under the E.M.S. scheme special centres are provided for such treatment.

Apart from the precautions mentioned above under double fractures, it may be necessary to institute some first-aid treatment, and I wish to warn you against the four-tailed jaw bandage commonly employed and depicted in some of the books. It can only pull the point of the chin upwards and backwards and tend to exaggerate the deformity. If a bandage is needed, and very often it is not, the barrel bandage described by Mr. Kelsey Fry is permissible. The horizontal portion encircles the forehead and the vertical portion is placed well back under the angle.

The dental surgeon commences treatment by preliminary removal of teeth in the line of the fracture, unless these teeth are essential to the proper fixation of the fragments, when they may be retained until such time as there is some union, and removed later. If they are not removed infection inevitably develops around them, and this will interfere with bony union. Fragments of bone which are *completely* separated are removed at the same time, although it is important to conserve any pieces which may possibly have an attachment, for it is remarkable how fragments, apparently loose, may be incorporated in the new bone that is formed. Oral hygiene is instituted at once. Practically all fractures in front of the angle are compound into the mouth (if not externally as well) and some infection is to be expected. It may therefore be necessary to provide external drainage at this stage or at a later date.

In gunshot wounds of the jaw there are two schools of thought. The one recommends free opening of the wound and the removal of *all* bone fragments and teeth in the line of fracture. The other adheres to the principles advocated above in doing the minimum excision and removing only those pieces that are obviously loose, and providing drainage. Only under exceptional circumstances should primary suture be contemplated. In very severe losses it is well to suture the mucous membrane to the skin and leave a defect to be closed later by plastic surgery.

The fragments are now fixed by making use of the teeth that are standing, and there are also two schools of thought as to the best method. The simplest method, which is quite satisfactory in the field or where a dental laboratory is not to hand, is the method of *inter-dental wiring* (Fig. 3). A piece of fine wire is bent at its middle and twisted here to form a small loop. The ends of the wire are passed between the necks of adjacent teeth into the mouth. One end is passed round the tooth in front, the other round the tooth

behind. The ends are made to emerge again in the buccal sulcus and are secured to the loop or adjacent to it. A loop is similarly attached to teeth on the other side of the line of fracture. It is now necessary to fix the loops on the lower jaw to similar loops on the upper jaw which therefore

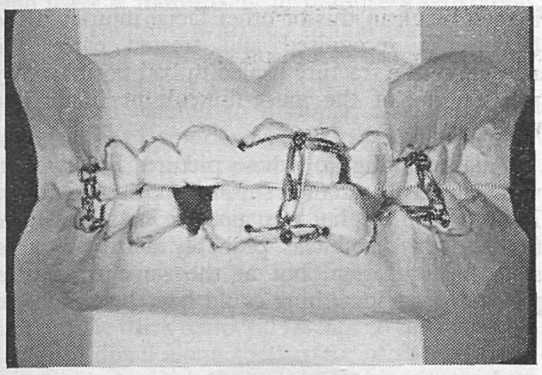

Fig. 3
Inter-dental wiring.

acts as the splint. Whereas good results have undoubtedly been obtained by this method of fixation, the wires tend to become loose very rapidly, requiring almost daily attention, and tend to produce loosening of the teeth and gingivitis.

A more satisfactory method, if it can be arranged, is to apply *cap splints* (Fig. 4). An impression is taken of the mouth (possibly in segments and possibly under an anæsthetic), and from the impression models are prepared. The fracture is reproduced on the model and a metal cap splint is made fitting the teeth accurately. This is now cemented on to the patient's teeth and nothing can now disturb the position of the fragments. In severe losses it may still be necessary to splint

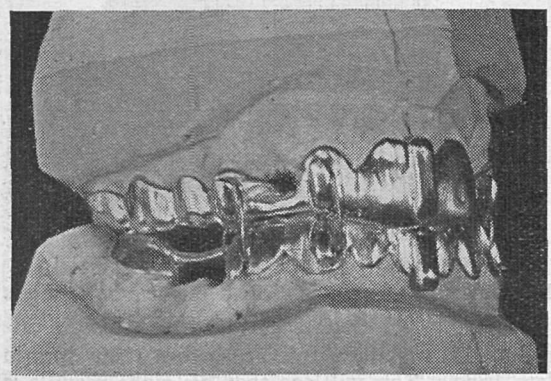

Fig. 4
Cap splints (in this case wired together).

the lower jaw to the upper, but in most injuries without loss this now becomes unnecessary.

I need hardly mention the variations that may have to be employed in individual cases for these are usually decided by the ingenuity of the dental surgeon, but I should like to indicate the difficulty, not uncommonly met in fractures of the molar region, where the posterior fragment is edentulous and tends to move forwards, upwards and inwards. This can sometimes be controlled by an extension piece of vulcanite at the back end of the splint, but soreness is soon produced by pressure on the gum. It may therefore be necessary to pull this fragment into its correct alignment by threading a piece of wire through the angle by operation from behind, and attaching this to a rigid vertical bar extending down from a plaster head cap. Occasionally a wire has to be passed around an edentulous fragment in the horizontal ramus to fix this in position and this is called *circumferential wiring*.

At times the fragments are best controlled by a stout wire moulded to fit the whole arch and wired to individual teeth (*Arch wiring*). If the upper jaw is edentulous the patient's own denture may be used to obtain the necessary occlusion and fixation. *Gunning's splints*, made from the patient's own upper and lower dentures, are also used at times. It only remains to mention that traction with small elastic bands is often required (attached to one of the aforementioned varieties of splinting) to bring back a part or the whole of the jaw to its proper alignment.

Once the jaw has been splinted there is little more to be done in the simpler varieties of fracture but to arrange for suitable feeding through a tube, and to keep the mouth clean. If the jaws are wired together, a tube can be passed through a gap in the dentition, or always behind the last molar tooth. A diet sufficiently interesting and of sufficient calorie value can easily be arranged. In the more extensive fractures with an external wound, as are common in war injuries, drainage has to be maintained, and through-and-through drainage is essential for the worst cases. From time to time obviously dead and loosened fragments, *i.e.*, sequestra, will have to be removed, and it is remarkable how quickly wound-healing will occur when this stage has been reached.

Bony union takes from three to six weeks in uncomplicated fractures, and much longer in infected and comminuted fractures. A gap of one or two centimetres may be bridged, but bigger gaps will almost certainly require bone-grafting not less than six months from the last evidence of infection. In the same way operation may be required for malunion, but this should not be

allowed to occur, and even where half of the jaw has been lost it is important to retain what is left in its normal occlusal position so that a bone-grafting operation may more correctly restore the original shape to the jaw.

It is interesting to note that X-ray evidence of union is most unreliable. A jaw may be firmly united on clinical and functional tests and yet a line of fracture may still be seen in the X-ray.

FRACTURES OF THE UPPER JAW

These fractures are even more common in motor and aeroplane accidents than mandibular fractures. To understand the nature of these injuries it is necessary to reflect for a moment upon the bony attachments of the maxilla. It articulates in the midline with its fellow, laterally with the zygomatic bone, above with the nasal, lachrymal and ethmoid bones. Behind it articulates with the palate bone and the pterygoid plates of the sphenoid.

Various degrees of injury are found. In the simplest a portion of the alveolar process may be broken off, or there may be a unilateral fracture above the roots of the teeth with a fracture of the hard palate ; or the whole maxilla may be separated at its articulations with the neighbouring bones. In more severe types there may be a horizontal fracture across both maxillæ, or both maxillæ may be pushed backwards *en bloc*. This injury is usually associated with comminution of other bones. In all but the lesser degrees of fracture the antrum and the ethmoid and frontal sinuses may also be entered, thus making the fracture compound. Yet healing may take place rapidly with remarkably little evidence of infection and only slight disturbance from an antrum full of blood. In this and in zygomatic fractures vigorous blowing of the nose produces emphysema of the cheek. Diplopia from depression of the floor of the orbit is unsightly and a great nuisance. The fracture can usually be palpated and the deformity detected by running a finger along the infra-orbital margin, but this deformity becomes obscured in a short time by swelling and hæmorrhage.

In the simpler degrees of fracture, if there is any fixed point in the upper or lower jaws, it is usually possible to reduce and control the fragments by some form of dental splint similar to that used in lower-jaw injuries. But in the more severe fractures open operation is usually necessary for reduction. Under anæsthesia it is possible to introduce an elevator into the antrum or nose to disempact the whole, and place the fragments in the best possible position. A dental splint is attached to the maxillary teeth with a bar projecting through the mouth. This is connected by fixed or elastic traction to a vertical bar falling from a plaster head cap. Union occurs satisfactorily in three to six weeks.

While it is not particularly difficult to produce a good result in this or other facial injuries if the fracture is recognised and treated early, the reduction of a fracture healed in bad position may present one of the most difficult or impossible tasks.

This man (Fig. 5), whose pictures I show you, was injured in a motor smash in early February. It is true that he was unconscious for some fourteen days and was probably hardly in a fit state for operation, but at the same time it is probable that something could have been done to

Fig. 5
Right maxillary fracture. Note depression of right eye.

reduce his maxillary fracture before I saw him in late June. You will see that his right maxilla is pushed backwards and downwards, which has not improved his looks and given him double vision.

FRACTURES OF THE ZYGOMA

The slender zygomatic arch naturally suffers fracture not infrequently. A simple depressed fracture may occur which leads to flattening or indentation of that side of the face. This is soon hidden in swelling and may therefore pass unrecognised for some time. A blow on the zygomatic bone itself is more likely to produce a separation at its articulations with the frontal bone, maxilla and temporal bone. Thus the antrum is opened, producing emphysema, and the floor or the orbit is disturbed leading to diplopia, and the infra-orbital nerve may be damaged in its passage through the floor of the orbit, producing numbness of the side of the nose and upper lip.

Early reduction is essential in all these fractures and is then usually simple. The method of Gillies and Kilner is used. An incision in the temporal region, just inside the hair-line, is deepened through the thick temporal fascia. A long elevator is passed down along the surface of the temporal muscle until it lies underneath the zygomatic arch. It is then possible to elevate the fragments with little difficulty, and they usually remain in position. In the more extensive fractures it may be necessary to enter the antrum through the buccal sulcus in order to disempact the fragments, and if these cannot be retained in position by packing the antrum a wire suture may be required at the articulation with the frontal bone. In fractures treated late a similar or more extensive operation may be required.

FRACTURES OF THE NASAL BONES

The causation of these fractures is obvious. The fragments may be pushed backwards or to one side, and in either case there is usually some displacement of the septum. In severe injuries there may develop a septal hæmatoma which shows a great tendency to become infected. If this occurs the cartilage will almost certainly necrose, allowing the nose to collapse, thus producing that variety of boxer's nose that closely resembles the syphilitic nose. In severe backward fractures with broadening of the nose the lachrymal sacs may be damaged.

Nasal fractures call for reduction as early as possible to minimise the interference with nasal function and to correct the patient's appearance. It is usually quite simple to elevate these fractures with a suitable pair of rubber-covered forceps passed into the nostrils. The fragments are disempacted and then replaced in correct position. A simple external splint, moulded in Stent to fit the patient, is sufficient if strapped in place. Internal splints are likely to give rise to pressure necrosis, though a glove finger packed with vaseline gauze may be permitted.

Late correction of a fractured nose may require refracture and manipulation, and where there has been loss of cartilage, a graft of bone or cartilage to restore the shape, for the shape of the nose is most important to the individual. At the same time operations may be necessary for deformities of the septal cartilage.

This lecture has been taken up with a consideration of injuries to the skeleton. I may on another occasion deal with injuries of the soft parts, including burns.

(This lecture was fully illustrated by photographs.)

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Reviews

Too Much College, or Education Eating up Life. By STEPHEN LEACOCK. Published by John Lane, The Bodley Head, London, 1940, Pp. 288. *Price 7s. 6d.*

IN Montreal Prof. Leacock is revered as a great teacher and as a good economist. Here Stephen Leacock is known as a humourist! This is a pity, for humour is a wine that crosses the boundaries of countries only in a vintage state, and of this Mr. Leacock's affords an example. He has a description of how they teach young men in Oxford by tutors luring them into their rooms and there smoking at them, which is inimitable, but for the most part his humour suffers the fate of most of that which crosses the Atlantic, including even large parts of his beloved Mark Twain, and is not really appreciated in this country. When, however, Professor Leacock writes on serious matters, he is always worth reading. Many an Englishman must owe to him his introduction to O. Henry, and his little book on how Lincoln freed the slaves is the best upon that crisis through which members of the United States passed, and which marked an epoch not only in the history of North America but also of the world.

This is one of his serious works and may be read carefully by all men and women of to-day who are anxious about our educational system. All the best thinkers of the past century have

agreed that the education of the many affords hope for the future of the world. There is no reason to suppose that, as a general principle, this hypothesis is wrong; but many view with concern the direction in which it is leading us. To some it gives merely a hall-mark for an entry into an unthinking world; to those who do not bear the mark, the entry into many ways of earning a living is barred; while there is the ever-present danger that instead of education leading youth out to think for itself, it will herd them into a mass of beings at the direction and at the mercy, or want of mercy, of a self-imposed leader. The book discusses that "discrepancy between education and life" which has resulted in a "wandering into the wilderness" that "has made the journey of education too long, too cumbersome, and too expensive." In his first chapter Prof. Leacock gives a short historical sketch of how we have arrived at our present system of education. In his second he describes "the machine at work." That is the crux of the whole problem, a machine has been set up and the machine has taken control; those who are at the "controls" can no longer control it. They can but accelerate or retard. In this chapter he throws out a hint which may make us biologists pause.

'In the matter of physiology, the knowledge of the human body (for people who are never to be students of medicine), I think I would go slow. I would be inclined to leave it out altogether. This is a heretical opinion, no doubt, and very different from the dogma, current since Huxley, that the wise child must know its own body. I doubt whether it is good for society that the ordinary plain man should know much of how his body works. The man who has learned to think of his heart as a pump, with an intake in it and valves that get out of order, is in the way of having a weak one. Better let him think of it as the seat of love and generosity, and it will beat away happily till it stops. Let him think of his stomach as where he puts his dinner, not as a fierce chemical furnace where acids are tearing up tissues and sending up exhaust gases like the back end of a tannery. Let him think of his bowels as the bowels of compassion as gentle as the New Testament and his blood as part of his lineage." This is wise writing, and should make those of us who follow Huxley think again.

In his next chapter Mr. Stephen Leacock produces a very good case for getting rid of Latin from school education, and a lament for the passing of Greek. He is not putting these views forward. He is trying to argue the opposite, but every reason that he gives in favour of our having given up Greek can be used to argue that Latin should now go, and every argument that he now uses for the retention of Latin should have been used forty years ago for keeping Greek instead. The Greeks gave us abstract thought, the Romans were practical men; and now—that in a changed world all that they practised has become impracticable, the power of abstract thought would help us to start again. The view that the mental stimulation that a smattering of a dead language is supposed to give, can be replaced by a working knowledge of a modern one is attractive, but is very much knocked about in his chapter on "Parlez-vous Francais?" which explains why so many of us with the education of a lesser Public School are so ignorant of this language.

We may leave the chapter on "Mathematics *versus* Puzzles," and that on "Has Economics Run to Seed?"—much of which might be applied to our teaching of Physiology, in order to come to "Psychology, the Black Art of College," which, after all, is a medical subject, and it is time to explain why a book on general education is being reviewed in a medical paper. It is because, with great regret, we have to disagree with Prof. Leacock when he says: "The work of technical and professional schools—. . ., medicine . . .—lies apart. Here the adaptation of the means to the end is sufficiently direct to lessen the danger of the wandering into the wilderness as liberal arts have done." Alas! it has not. The position of medical education to-day is as bad as anything described in this book, and this is due to the fact that it has lost "its adaptation of the means to the end." It began with the disappearance of the apprenticeship system. In the old days the apprentice picked up many details of treatment before he had finished his time. It was all empirical, in spite of which much of it was valuable in after-life; but he did come in contact with human beings. He got to know them in their miseries and their sadnesses; he rejoiced with them in their recoveries, and when he came up to walk the hospital he applied what he learnt to the human being whom he knew. Now he comes up and studies biology. No doubt the frog and the amphioxes do him good, but he then becomes introduced to the bunny-rabbit, and when he passes on to physiology the bunny-rabbit takes control of him. He learns his physiology and pathology upon it with side-lines upon mice, rats and guinea-pigs. Late in his educational career he comes into the wards and thinks of the human mind and body in terms of the herbivora and rodentia. He passes his examinations and goes out into the world to find that he has got it all wrong. He does not know the human being. "The road comes to an end just when it ought to

be getting somewhere. The passengers alight shaken and weary, to begin, all over again, something else."

It is not suggested that the passing of the apprenticeship system was not a necessary reform, but it is suggested that we are now, after fifty years, only beginning to realise the full effects of the change. The great problem in medical education is to get back to the human being. That is what psychology is trying to do for us, but you cannot do by talk and textbooks what you ought to have done by subconscious behaviourist observation of the masses. Not that psychology should not have its place in the curriculum. It is a part of physiology and should be studied there. True it is in that very early stage of physiology in which so little is known of the subject that there are various exponents basing their conclusions upon various hypothesis, every one of which is probably wrong, but in each one of which there may be some truth from which a theory will arise to take us further; but this will not be for a long time unless a Gallileo or a Newton arise. In the meantime we may study the psychology of the schools, but we shall learn the psychology of practice by rubbing shoulders with our fellowmen. In the clinical period it is not psychology that is the proper subject for a specialism. That is psychiatry. The clinician is not there to teach physiology. He is there to use the physiology that the student already knows in clincal medicine, and for each part of the body the whole of physiology must be used.

The physiology of respiration is not only the business of the chest physician, and the physiology of the mind is not only the business of the psychiatrist. The chest physician will be more up in the details of respiration, and the psychiatrist will know more about the form of psychology that he follows; but everyone will need the use of both branches of physiology in his work, and he will need more of the physiology of the mind than of respiration, for whereas there are but few affections of the human body upon which respiration does not have some effect, there are none upon which the mind has none. It is this raising of the physiology of the mind to a super-specialism revealed only to the hierarchy that is widening and prolonging the gulf between the theory and practice of medicine. Back to the human being must be the cry of every teacher of clinical medicine.

Not that the neglect of the mind in ordinary medical, and especially surgical, teaching is our only trouble to-day. There is also medicine in pigeon-holes. Everyone has to specialise to-day. No human brain can hold all the details of every branch of medicine. The general surgeon, in the sense of ubiquitous, disappeared when he gave us sucking-leeches. But a different form of general surgeon has arisen. He is the man who bases his surgery upon general principles and learns the details, whereby he carries these out on a limited part or parts of the body. We cannot to-day divide surgeons into general and specialist. There are surgeons in a general department and surgeons in a special department. And yet, alas! there are still specialist surgeons, for specialism is a frame of mind which sees all diseases concentrated upon one small area of the body and develops a panacea by interfering with that region; but this frame of mind is as likely to appear in a surgeon in a general department as in a surgeon in a special department. Now the great trouble in medicine and in medical education to-day is that it is assumed that every surgeon in a general department is a general surgeon and every surgeon in a special department is a specialist. The latter is not allowed to move out of his pigeon-hole and to peep round the corner into the next one; he is not expected to have any knowledge outside his own narrow specialty or to be allowed to criticise, to doubt, or to enquire into the statement of anyone in another pigeon-hole. Hence arises the worst thing of all for him. No one else is allowed to peep into his pigeon-hole. It may be cluttered up with the debris of dead hypotheses masking the relics of practices that no longer serve a purpose. And yet outside the pigeon-hole his word goes as law. His opinion is accepted as a fact, and when it is wrong, as it must so often be, all subsequent deductions, diagnoses, and decisions based upon it are wrong also. Physicians claim they have no right to criticise him, and when he says he does not know, tell him that he does not know his job, whereas it is because he does know it that he will not give a dogmatic opinion. Then no more patients of the same type are sent to him. He is unable to learn and to study. He is driven into a dogmatic frame of mind of a narrow specialised nature until he begins himself to believe that the conclusions to which he himself has come upon insufficient evidence are incontrovertible facts. And for twenty years this scheme of pigeon-holes has been the keynote of the teaching of medicine. The machine is at work. "'We've finished Scripture,' says a little girl in a child's school, 'we had it last year.' For her the world of religious thought is all set." "I've done Throats," says the boy to the girl student friend; "at our place we do it before midder." And he ceases to think of them again as they do not come into the Final. "The College student opens his career by classing himself not according to the year in which he enters but according to the year in

which he hopes to get out." The medical student enters the wards with high ideals of helping sick human beings. He does not entirely lose these, but comes to thinking most of when he will get qualified. " The class matriculating in 1940 call out in their infant breath, ' Rah ! Rah ! Forty-four.' " " I'm taking Path. in October twelve-month," says the new dresser to his chief.

We've got to get out of our pigeon-holes. We've got to be allowed to go into the other ones and see what we can adapt from them, and we've got to insist upon their coming into ours and telling us what may be the dead relics of an ancient fetish and what may still have life in it. Elliott Smith drummed into the anatomical world that man has risen to the place in Nature that he holds because in the development of his nervous system he never specialised. It is the same with the further development of the human mind. If we specialise we may lord it over the medical world for a time as the ichthyosaurus did ; but very soon we shall descend into the dark like troglodytes in a deep cavern. Get out of your pigeon-holes. No, alas ! we cannot do that. We are stuck too fast in them. But we can do our best to stop the next generation getting into other ones.

T. B. L.

The Sexual Perversions and Abnormalities. By CLIFFORD ALLEN. Published by the Oxford University Press. 7*s.* 6*d.*

THERE has been a tendency to regard the sexual perversions as something disgusting to be ignored if possible. Such an attitude has been fostered by some of the older books such as Kraft-Ebing's, which provide an almost pornographic collection of cases without any attempt to elucidate the origin and treatment of the perversions. Every doctor is from time to time called on to help patients suffering from these conditions, and an attitude of disgust on the part of the doctor is likely to prevent him from being of any use to the patient. This book is a serious study of the perversions and serves to disperse much of the taboo associated with the subject and particularly welcome is the biological point of view expressed in the first few chapters. There is a good review of the work of various observers on the sexual practices of animals, especially apes, which show sexual activity with their mothers at an early age. During adolescence, homosexuality is practised before the stage of mature normal sexuality is reached. Various oddities in other animals are described, such as the male newt whose sexual act consists in watching the female put the sperm packet into her egg tube. Sexual deprivation and abnormal conditioning produce sexual abnormalities in animals, as probably every dog-owner is aware. The conclusion from the biological observations is that the pervert is forced into abnormal behaviour by the same forces, differently conditioned, which drive the normal into normal sexual behaviour.

In the chapter on the instinctual development in man, there seems to be some difficulty in reconciling the biological approach with psycho-analytic theories. There are some rash statements such as " the new-born child is born in a state of hate and has no other emotion than hate in its repertoire," and vague remarks such as " sadism is due to the externalism of the death instincts and libidinisation of the various orifices and organs." Such phrases are highly indigestible to the average medical man reading the book. The theorising about human perversions is, in fact, not up to the standard of the case histories which illustrate well the development of the perversions. Particularly pleasant is the story of the young man, a masochist, who finally married his woman analyst on successfully completing his treatment. Does this suggest a sadistic element in psycho-analysis itself ?

As one would expect, most of the perversions are found to be related to the patient's attitude to the parent of the opposite sex and to the circumstances by which the sexual urge is first aroused in the adolescent. The endocrine factor is not stressed, since the vast majority of cases are purely psychological problems, but a definite endocrine disorder has to be excluded in each case.

The treatment for the simpler conditions such as some cases of impotence and frigidity is by suggestion and superficial analysis ; for homosexuality, sadism and masochism deep analysis is used. Some cures are reported of these latter conditions which are often very hard to treat on account of the patient's frequent lack of a genuine desire to change his inclinations.

The prevention of the sexual perversions is obviously more important than their treatment. Clifford Allen makes the following sensible suggestions : the infant should be breast-fed regularly and adequately, there should be a happy home without quarrelling between the parents, the adolescent should not be tactlessly teased about the first normal flirtation, the child should be protected from sexual assaults, the father should attend to the upbringing of his child instead of spending all his spare time at golf, school-teachers should be healthy normal people, not perverts, and preferably married. One must add, however, that some people seem to have been mismanaged in all these ways and yet they remain defiantly normal.

Finally, the question of dealing with active anti-social perverts is raised. There is no doubt that

the author is right about the need for special institutions to which such cases can be committed by the courts for prolonged treatment. The community at large and even our prisons need to be protected from their influence, and the present system of sending them on conviction to prison for a short time is most unsatisfactory. They are to be regarded as suffering from an illness which may be infectious. Unfortunately, the present is not a time for setting up such an organisation; perhaps it may be a small part of the new social order after the war.

F. W. B.

The Neurosis in War. By EMANUEL MILLER. Published by Messrs. MacMillan & Co. *Price* 10*s.* 6*d.*

The Psychology of Fear and Courage. By EDWARD GLOVER. Published by the Penguin Press. *Price* 6*d.*

Instincts of the Herd in Peace and War. By W. TROTTER. Published by Ernest Benn, Ltd. *Price* 5*s.*

NOTHING is possibly more significant of the strides made by modern psychology than the ready acceptance by psychologists of the empirical solutions found by society for the fundamental psychological problems facing it. These solutions are now said to be in conformity with the principles laid down by modern psychology.

In many ways this approval of some established institutions recalls the changed attitude of the physiologist to established diets and habits of the community. These were at first regarded as entirely arbitrary and accidental, and it is only recently when the physiologist has learned something of the complexity of these problems that he approached these empirical physiological solutions with much greater respect and diffidence.

As already mentioned, this more sober approach to established institutions is also reflected in modern psychology. Thus, one of the contributors of "The Neurosis in War" describes the Manual of Infantry Training as "a veritable mine of rule-of-thumb applied psychological prophylaxis." These reflections should, of course, not lead us to the complacent conclusions that everything which exists is of necessity right; they merely indicate that a full understanding of the origin of established institutions should precede their condemnation or attempts at reformation.

If anyone should still doubt the practical value of psychology of to-day one need only look to the extensive use it has been put to for a variety of perverted purposes. No better instance of the abuse of psychological principles can be found than the subject of enemy propaganda.

Dr. Glover has many interesting things to say on this topic, and, like everything in this little book, it is expressed with admirable lucidity. It is difficult to refrain from quoting extensively.

"The civilian is attacked on all sides. Not only is he bombarded with every conceivable form of missile; his mind is bombarded with every conceivable form of propaganda. Propaganda is much cheaper than a military offensive."

"It can reduce proud and self-respecting nations to a state of gibbering inefficiency."

"The object of enemy propaganda is to sow distrust. It is an attempt to loosen the bonds that hold people together and so to demoralise and finally disintegrate the group. The first step is simple. It is to mix what might be called a propaganda salad, or, if you prefer it, a propaganda cocktail. The recipe is as follows: take first of all a few hard facts, the news of some reverse or other, if necessary doctored to make it more impressive. (This is to shake our general confidence and make us more receptive to suggestion.) Mix it with a few equally hard facts about class distinction or grievance or hardship. (This is to set one group against another.) Add some aspersions on the motives and personal character of the nation's leaders. (This obviously to weaken the leading strings of national feeling.) Flavour as required with some good journalistic touches (to make a plausible story.) Spice with a few threats. Serve hot and strong over the radio.

"Now it's not a bit of good reproaching the enemy with being an unscrupulous liar. To begin with, he doesn't mind. All he wants to produce is a certain effect. He takes the same pride in his work as a doctor does in compounding a good prescription. But whereas the doctor hopes to make us feel good, the propagandist wants to make us feel bad. The real cure lies in discovering why propaganda succeeds in getting under our skin. And nine times out of ten the cause lies in our own minds."

Without meaning to be disparaging one can say that the most valuable part of "The Neurosis in War" is the appendix. This contains among other things extensive extracts from the "Report of the War Office Committee of Enquiry on Shell-Shock" (1922). Dr. Emanuel Miller rightly begins these quotations by saying: "This Report, the product of military experience, is of inestimable value and should be read by everyone interested in the subject."

This book is made up of contributions by a number of writers who have had first-hand experience of neurosis under military conditions

in the last war. Much of the matter in the book is an amplification of the conclusions reached by this War Office Committee.

Two observations appearing in this Report possibly deserve greater emphasis than they receive in the book.

Obviously a large proportion of the psychopathological material encountered during the war is made up of cases in which war is of little or no ætiological significance. One might mention in this connection that a group which assumes some importance under war conditions consists of persons of a narcissistic make-up. "They are proud of their own bodies, they are literally in love with themselves. Such men are terrified of the prospect of a wound and the possibility of annihilation rules out all idealism. They cannot face the horrors of war because they identify themselves with every mutilation and death which the soldier has to witness."

But the term "military neurosis" should be restricted to those cases in which neurosis is preceded by terrifying experiences, by fatigue, exhaustion, exposure to inclemence of weather, loss of sleep, lack of food and water. This exhaustion state usually passes off after a few days' rest. In the words of the War Office report, it is desirable that these men should receive treatment within the battalion area or in the divisional rest camps.

Now that London is in the firing-line these cases are also seen in "civil" practice.

To ensure full rest, which these cases require above everything, hypnotics should be used in liberal amounts. Cases which are refractory to this early and elementary treatment should be evacuated. These cases requiring long treatment in hospital were found to be useless for further front-line service. According to the classification recommended by the Committee, these usually belonged to the anxiety and obsessional states.

The other principle stressed in the Report is that of prophylaxis; this is regarded primarily as a recruiting problem, a problem of "discrimination between recruits who are and those who are not of normal nervous stability." Reference is made on pages 23 and 167 to procedures adopted by the American Forces to ensure the elimination of recruits unsuitable for service on psychological grounds.

The late Professor Trotter's book, though made up of papers written between 1908 and 1919, is remarkably topical to-day. The most important paper in this book is one entitled: "The herd instinct and its bearing on the psychology of civilised man." It is barely fifty pages long, but in it is contained a brilliant analysis of fundamental psychological principles. The subject is approached from the biological point of view, and in a series of broad and scintillating generalisations the distinguishing elements of human psychology are formulated. No better introduction to psychology could be recommended.

War Wounds and Air-Raid Casualties. By Various Authors. Published by H. K. Lewis & Co., Ltd. *Price* 10*s.* 6*d.*

THESE are a series of articles which have appeared in the *B.M.J.* at various times and are now presented in book form. They are contributed by authorities who have had considerable experience in the last war.

The major part of the book deals with war wounds of different regions. The sections on the chest, abdomen and head are full of sound practical advice. There is also a chapter on War Surgery in Spain; the present indiscriminate bombing makes this information very interesting and useful.

The book concludes by dealing with psychological casualties in war, chemical warfare and the effects of high explosives. This book should prove of assistance to those who have already dealt with, or are about to deal with, air-raid casualties.

F. R. K.

Surgery of the Hand. By HANDFIELD JONES. Published by E. & S. Livingstone. *Price* 15*s.*

THIS new book is the outcome of having a special department for dealing with hand cases. In the introductory chapter modes of prevention of infection, especially in factories, are suggested. Later the importance of an early and an exact anatomical diagnosis is stressed. For most operations a full anæsthetic and a pneumatic tourniquet are advised.

The usual infections and their treatment are described, and then a special chapter is devoted to the complications of hand infections; this chapter is probably the best in the book. Emphasis is also laid on post-operative physiotherapy and the importance of avoiding secondary infection. In this section the treatment of anthrax calls for comment in that excision is stated to be as successful as N.A.B. or serum.

The section on injuries is very good and up-to-date; possibly more could have been written about the treatment of compound crushed fingers, which are a common problem. The book is completed with a full chapter on tumours of the hands and fingers.

This book is beautifully illustrated and can profitably be read by students, housemen and surgeons.

F. R. K.

njuries of the Jaws and Face. By W. WARWICK JAMES and B. W. FICKLING. Published by Messrs. John Bale, Sons & Staples, Ltd., London. Pp. 119. *Price* 15*s*.

IT is a heavy reproach to most of the general hospitals in London and to all sections of the surgeons and dental surgeons who were engaged in jaw and face surgery for four and a half years during the last war that their experience has largely been allowed to lapse and has not been used to benefit the many cases of neoplasms and injuries of the jaws which come to the general hospitals for treatment in peace time. Before this war is ended the Army will have to play its full part, and these types of gun-shot wounds will again be numerous. Not one of the younger surgeons and dental surgeons who may be called upon to treat them should fail to study this book, which is now to be found in the Wills Library. The authors speak of it as being hurriedly written; we can only wish that most of the books which we read were as lucidly written. One hundred and ninety-four illustrations, most of them skiagrams of cases actually treated in the last war and clearly reproduced, will help every worker in this field of surgery. The initial treatment of the patients, the making of the splints, the handling of bone grafts are all described. Our only regret in reading this admirable book is that a plastic surgeon of the last war has not been asked to supply a section dealing more fully with pedicle grafts and other means of replacing the loss of the soft tissues of the face. We hope that this may be done in a second edition.

F. D.

Diseases of the Nervous System. By F. M. R. WALSHE. Published by Messrs. E. & S. Livingstone. *Price* 12*s*. 6*d*.

THE author has set out to write "a simple textbook adapted to the needs of the student and practitioner," and he has succeeded admirably in performing this difficult task. The brevity of the book—it is barely 300 pages long—is attained not by the baneful though common practice of condensation and abstraction, but by the judicious omission of matters not of immediate importance to the readers for whom this book is intended. Such simplification inevitably carries with it the danger of misrepresentation, and the book contains a few statements which would have gained accuracy by fuller qualifications and reservations. Adequate description is given of all the commoner neurological conditions.

The clinical matter is presented accurately and points are stressed with discrimination and judgment.

Some of the therapeutic measures at present in vogue are subjected to trenchant criticism, and the evaluation of proper treatments of intracranial tumours and of essential hypertension is especially timely and valuable.

Some attempt has been made to depart from the conventional presentation of the subject by devoting one part of the book to a general review of neurological symptoms and their significance. It is to be regretted that more space could not have been devoted to this section.

The inclusion of a description of bromide intoxication in a textbook of neurology is long overdue. An adequate account of this condition is included, but more stress should have been laid upon the frequency with which hallucinations occur in this intoxication.

The book is singularly free from inaccuracies, and one hopes that the few misstatements mentioned below will be corrected in future editions.

On page 59 it is said that convolutional atrophy when occurring in a child is especially characteristic of increased intracranial pressure. This is, of course, incorrect. It is particularly in children and in young adults that one meets with these radiographic changes in absence of any demonstrable intracranial disease.

On page 95, when discussing cysticercosis, the following statement is made: "Diagnosis depends on the recognition of palpable cysts in the muscles, and by radiograms of the skull which reveal the shadows of calcified cysts." Cysts are not palpable within muscles unless they are situated within the tongue. Their presence is only exceptionally revealed in radiograms of the skull, and they are best demonstrated in radiograms of muscles of limbs.

A special tribute must be paid to the English, which throughout the book is always accurate, crisp and succinct.

In conclusion, it is pleasant to bid farewell, one hopes for ever, to such old companions as "K C C," "A C C," and "Wernicke's hemianopic pupil reaction." R.I.P.

S. B.

The Pharmacology and Therapeutics of the Materia Medica. By W. J. DILLING. Published by Messrs. Cassell & Co., Ltd. Sixteenth Edition (revised), 1940. *Price* 12*s*.

THIS well-known and deservedly popular materia medica has now reached its sixteenth edition, the fortieth printing in fifty-six years of life. This policy has been adopted in order that the more important therapeutic discoveries may be introduced so soon as they become acceptedly successful. The book is very complete and few therapeutic drugs or remedial

measures are omitted. The section on Oxygen Therapy is very inadequate as regards the methods of administration that are advocated; in the treatment of hæmatemesis, the policy of starvation for a full day after hæmorrhage has ceased is still advocated, although the Meulengracht diet is mentioned as a later measure. Similarly, the advocation of purging and diuresis to dispel "effete" matter in arteriosclerosis savours rather of the nineteenth century. In stating that hydrocarpus oil has no influence on the tubercle bacillus, the important therapeutic use of local injections of its phenyl ester in lupus vulgaris is ignored. The use of pneumococcal anti-serum in lobar pneumonia is unduly stressed, when it is considered how seldom these preparations are seen used in practice. A very valuable appendix presents the essential features of such therapeutic procedures as massage and electrotherapy, baths and mineral waters and the principles of invalid dietaries. A useful addition is the provision of the official pharmacopœial names for many preparations previously known only by their registered trade name, such as Avertin, Doryl and Evipan. This book can certainly be recommended as a useful, accurate and comprehensive textbook of pharmacology and therapeutics.

N. A. N.

Index of Treatment. By HUTCHISON and HILTON. Published by Messrs. John Wright & Sons, Ltd., Bristol. Twelfth Edition, 1940. *Price* 42*s*.

THE revision of this well-known member of the Index series provides a welcome opportunity for setting forth its merits. The series is described as a complete library for the busy practitioner; it is not perhaps so familiar to the student, to whom it is but another massive volume upon the library shelves. There will not be many who can afford to add this volume to their traditional and formidable list of textbooks, but it is valuable to all as a book of reference, whatever their stage in the clinical period. These must also remember that the time will come when there is no longer a library or a helpful colleague to help to solve their problems. Treatment is an art that can only be acquired through practice, but conditions may be encountered at any time with which one has had no previous experience. A standard reference book has its value also in the treatment of common disorders, comparison of the various alternative methods may be made, and the results of personal experience placed side by side with those of our teachers and with those of tradition.

The contributors to this volume are all well recognised and experienced authorities in the particular diseases whose prophylaxis and treatment they describe. The articles are comprehensive; for simplicity, the main lines only of treatment for each condition are described, the arguments for and against other recognised therapeutic procedures are summarised and the prophylaxis and treatment of all the common complications are also considered. The principles only of the treatment of surgical conditions are dealt with, the details of surgical procedures being very wisely omitted from a work of this nature. In this new revised edition, the opportunity has been taken to introduce the now well-established principles of chemotherapy in the treatment of those diseases where its value is now unassailable. The relative value of the different drugs of the sulphonilamide group is summarised in the section on Septicæmia. In the article on Tetanus, modern work on massive antitoxin therapy is described. Several other articles have been completely revised and, in order to render the volume even more comprehensive, some fresh minor conditions have been introduced, such as Rat-bite Fever and Sebaceous Cysts. In the twenty-three years since its first publication, this book has established itself as a standard work of reference; it can be recommended as a sound investment for any student with an eye to his future practice.

N. A. N.

Rose and Carless's Manual of Surgery. By C. P. G. WAKELEY, D.Sc., F.R.C.S., and J. B. HUNTER, M.Ch., F.R.C.S. Published by Messrs. Bailliere, Tindall & Cox. Sixteenth Edition. *Price* 30*s*.

THIS textbook has now reached its sixteenth edition over a period of 42 years. Of necessity, its structure and personality has been much modified and the enthusiasm of its creators overshadowed by the whims and advances of modern surgery and the views of its present editors.

For convenience of handling, the edition consists of two volumes; for this same reason, a chapter and subject-index should appear in each. How tiresome is an unindexed book! The coloured plates are excellent and many good illustrations have been added, though there remain some the replacement of which would be an improvement. The general layout remains unchanged, though the earlier chapters on general pathology and bacteriology have been shortened considerably.

The plea that war surgery is traumatic surgery does not excuse a totally inadequate introduction to this subject, nor does so brief an account more than touch upon those problems, which it makes no attempt to discuss. Throughout the book

there is a tendency to offer an impressive number of facts and conditions without due stress or indication of their relative importance. Biesenberger's operation of mammaplasty is given a description with a full page of illustrations, whilst the infinitely more important problem of bleeding from the nipple is not discussed. The prophylactic and curative doses of anti-gas gangrene serum, the value of short-wave diathermy for carbuncles, and the dangers of radiotherapy in treatment of lupus vulgaris are details which matter much more to the average reader than the methods of partial gastrectomy, yet they are not mentioned. There is a new chapter on anæsthesia, and those on the special subjects have been revised.

The problems of herniæ are discussed fully and with clarity and the account of testicular disease is good. The importance of sanatorium regime in the treatment of surgical tuberculosis is stressed throughout, whilst operative treatment, as a measure of aiding the general measures, is given its correct place. The surgery of the brain is treated in an attractive manner, the illustrations of this section being particularly good; the commoner nerve lesions are given a detailed account.

The discussion on fractures is frankly disappointing. The old-fashioned classification of fractures of the anatomical and surgical neck of the humerus has little to commend it, and the treatment advised centres on the abduction splint—a weapon of considerable danger in inexpert hands. Extension of fractured metacarpals through the fingers often fails to reduce the deformity, and may leave the fingers stiff in extension, a bad functional position.

Not everyone will like this book, but many will continue to read it and benefit by its teaching.

F. N. G.

Elementary Physics. By G. STEAD, D.Sc. Published by Messrs. J. A. Churchill, Ltd. Sixth Edition, 1940. Pp. 562. *Price* 12*s.* 6*d.*

PROFESSOR STEAD'S book on physics has now become a standard textbook among first-year medical students, because it is designed expressly to help students pass their Physics examination. It contains an elementary but satisfactory account of heat, light, sound, mechanics, properties of matter, magnetism and electricity in the relatively small space of 562 pages. The book contains as much as is required by the examining bodies, but no more. The many examples worked out in full enable the text to be followed more readily, and the 90 examination questions collected at the end of the book allow the student to put to the test what he has learned. Laws and important principles are printed in heavy type, and those parts of the subject which are of interest but not of importance for the examination are in small print, thus making easy a rapid review of the book. These devices, together with a clear explanatory style, make the book really valuable to intending candidates. Short descriptions of various instruments used in clinical work, such as the ophthalmoscope and electro-cardiograph, have been included, to counteract "the tendency of some students to regard the subject as something which is entirely useless." This edition does not differ very substantially from the previous one.

M. L.

The Anatomy of the Female Pelvis. By F. A. MAGUIRE, F.R.C.S. (Eng.), F.R.A.C.S. Published by Messrs. Angus & Robertson. *Price* 10*s.* 6*d.*

THIS is the third edition of this small book devoted to a description of the structures in the female pelvis and their relationships. It is clearly written and contains some good diagrammatic illustrations, but it contains very little that cannot be found in the standard textbooks of anatomy. It is, however, easier to read and therefore will be found useful by those wishing to make a careful study of the anatomy of this region.

J. B.

Statistical Methods for Medical and Biological Students. By GUNNAR DAHLBERG. Published by Messrs. George Allen & Unwin, Ltd., 1940. *Price* 10*s.* 6*d.*

THE average medical student usually passes through his career with but a hazy idea of the method of statistical analysis. He is taught and sometimes appreciates the value of statistics in estimating the results of experimental procedures, and of the necessity for effective controls in all investigations. When the time comes for him to think for himself, to evaluate the importance of the articles he reads and later to attempt to make some original contributions out of his own case records, he is inevitably handicapped by his lack of knowledge of the mathematical approach to statistics. This book represents an attempt to describe the concepts upon which statistical methods are based. No special mathematical knowledge is assumed, and the substance of the book is reasonably intelligible to the average mind. In order to digest it thoroughly concentrated study is necessary, but the knowledge thus acquired is undoubtedly valuable. The matter is set forth simply and the ground suitable for an elementary textbook is amply covered.

N. A. N.

The Anatomy of the Eye and Orbit. Including the Central Connections, Development and Comparative Anatomy of the Visual Apparatus. By EUGENE WOLFF, M.B., B.S. (Lond.), F.R.C.S. Published by Messrs. H. K. Lewis & Co., Ltd., 1940. Second Edition. Pp. x×374, with 242 Illustrations. Crown 4to. *Price* 31*s.* 6*d.*

A SECOND edition of this already much appreciated book is very welcome. The author, pre-eminently qualified for the production of such a work by his ten years' demonstratorship of anatomy at University College and three years' lectureship in the same subject at his special hospital, has taken the opportunity to make several corrections and to add some sixty illustrations. These latter include a series of flat sections of the retina, which are an invaluable assistance to the proper understanding of the structure of this membrane. Further, the section dealing with the blood supply of the visual pathway—a branch of the subject which has long been of especial interest to the author—has been rewritten, and minor additions have been made to the text.

The work is of a very high order of excellence. The arrangement is clear and helpful; the illustrations, adequate in number, are mainly from the author's own dissections and preparations, and are beyond praise. Printing and production are first-class, and the size of page has been carefully chosen to make reading and reference to figures easy and convenient. This is an invaluable reference book for students, and should find a place on the shelves of all interested in the specialty.

Sector News

Guy's Letter

GUY'S stately spires stand intact in the midst of London's nightly fire and fury. Apart from the damage suffered some weeks ago, the hospital is carrying on in all its departments with ever increasing momentum.

Because of the inconvenience resulting from the loss of our central staircase in Hunt's House, an emergency casualty ward was immediately improvised in the reception hall. It has been functioning very satisfactorily, especially from the point of view of treating shocked casualties; this is so because resuscitation can be started on the patients almost as soon as they are admitted. Such a ward would be most useful in peace time, and it is to be hoped that when the "new order of things" is organised, this new institution will be maintained.

There has been considerable revision of opinion about the relative safety of the Guy's buildings; accordingly it has been decided to reopen Martha and Dorcas wards for the treatment of civilian sick. A visit to the wards certainly impresses one with the genius of the architects of Guy's House. These wards are light, spacious and by reason of their position, readily accessible. Both the nurses and medical staff are looking forward to their new working quarters with the greatest anticipation.

This week we are saying good-bye to a large number of students who were stationed here for their July to October appointments and have now been transferred to the bases. Their work throughout the last few months has been most valuable and between them, they have added one more rung to the ladder of Guy's tradition.

B. L.

Pembury Letter

THE staff at Pembury has undergone a number of changes recently. Firstly we are glad to report that Mr. Lambrinudi has returned to us after an absence of about three months. More recently still, Dr. Chris Darke and his bevy of Pre-Clinicals burst in upon us, and then to balance the claims of medicine and surgery, we have been glad to welcome the somewhat peripatetic Harley. In the Residents' flat Enderby, complete with tin hat, has been a welcome addition.

On the other side of the balance sheet we record that Dr. Macfadyen has left us for the Army. Though not a Guy's man, he must now be known to many of us, and his extraordinary charm and tact have been invaluable to everyone. He was also directly responsible for the harmony that reigned in the Residents' Flat, an achievement not easily obtained. In wishing him the best of luck in the future, we record our sorrow at his going. Another who has left our ranks is Mr. Darling, who during his few months at Pembury, endeared himself to everyone. His sincerity and humour, combined with a high ability made us very sorry to lose him. We hope that before long he will return to Pembury.

Like others in the sector, we are about to receive large numbers of students, and the total will be above one hundred. Some will be old friends and we trust that the others will soon settle down to a country life.

The more controversial topics of our previous "Letter" have not been without their repercussions and more may be heard later. The immedi-

ate effect has been that whilst the soap situation has improved in the Childrens' Hospital, the Residents now go unwashed ! ! N. M. J.

Farnborough Lament

Being the inscription on a tablet it is proposed to erect before a neighbouring building (the remains of).

Gentle stranger, passing here,
Stay a moment, shed a tear.
Underneath this funeral pyre
Lies our well-loved night attire,
Horribly consumed by fire.
Overnight a passing Herr
Undermined our underwear.
Now there's nothing left to tear—
Let it R.I.P.

. . . . .

Now hurry on. 'Neath yonder comb's :
Lie two unexploded bombs.

G. L. L. R.

Orpington Letter

THE past week has seen the opening of the Orpington Hockey Season and already three games have been played. We started off with a match between the Massage Department and the House Officers, in which we were deservedly beaten by 2-0; humiliation at our defeat has been partly offset by seeing that the victors were only slightly less stiff than the vanquished for the next few days. This year we find ourselves with a properly marked pitch and goal-posts of standard size—thanks again to the Massage Department; in return we promise that we shall do our best to learn the rules.

For some months now the interests and welfare of the Mess have been entrusted to the able secretaryship of Hawkins, who has done noble service on our behalf. The manifold activities of the Mess have recently made it necessary to appoint a number of Under-Secretaries and we now have Hammond as Hockey Secretary, Ponder and D. P. Roberts in charge of our musical evenings and Budd as Commissar for Food, an appointment which has produced a welcome flow of oysters and lobsters. Eve has also been appointed local M.O.H. to deal with a veritable plague of flies which has descended upon us.

We are glad to see Bucknall back in our midst and hope that he has completely recovered from his recent illness.

Our deepest sympathy, and that of all Guy's men who know them, is extended to Dr. and Mrs. R. A. Johnson who have lost their little boy as a result of an air raid and are themselves patients in this hospital. A. T. M. R.

Correspondence

War Wounds of the Chest

To the Editor of the GAZETTE

SIR,—In my lecture on war wounds of the chest which you printed recently I wrote "excision and primary suture of the wound should be performed if the case is received within a few hours, in general not more than from four to six hours—sometimes up to twelve hours." I hesitated before adding that final phrase, and I left it in only because I did not want to be accused of being inaccurate, since I have been able to obtain safe primary union in several bad chest wounds sustained in recent raids and reaching hospital about ten hours after being hit. Still, I was worried about it.

Mr. Layton has written to me: "You have made one grave mistake where you add the afterthought 'sometimes up to twelve hours,' (p. 273); re-write this 'received within four hours, or possibly six. After that, up to twelve, it may come off, but not one knows in which case.' With your experience it may come off more often than with mine, but if I came into your hands with a chest wound in those second six-hours please do not use your judgment or experience—obey the advice you give to others. In military medicine a certain amount of dictatorship is needed. Ask those who were in France after I left, about trench feet. It was treated by the threat that the C.O. and M.O. would lose their jobs and risk court-martial if any high number occurred in their unit. In Palestine men were dying in the C.C.S.'s from cerebral malaria, with their veins of Galen choked with parasites, which might have been saved had they been given a single dose of quinine into the buttock up in the line. It became a disciplinary matter for the M.O. of the battalion or the C.O. of the field unit to show cause why it had not been given. You will have to issue an order that, except in a recognised chest unit or by an approved chest surgeon, *no* wound of the chest is to be submitted to primary suture after six hours. But it will take you two years to catch up that scientific afterthought."

Mr. Layton has put this so well that I thought that others should read it. It needs no extra comment from me. My error lay in taking

account of certain special cases in making what should have been essentially a general statement.

Yours, etc.,
R. C. BROCK.

Guy's Hospital, S.E.1.

Wills Library: Valuable Books

To the Editor of the GAZETTE

SIR,—Dr. R. T. Hinde and others of your readers may be interested to know of the steps already taken by the Wills Library to safeguard some of the books of the greatest value and historic interest, and the facts are put clearly in the following extracts from the Minutes of the Wills Library Committee :—

" *Meeting on may* 11*th*, 1939.—Old and rare books for evacuation.

" The Hon. Wills Librarian informed the Committee that arrangements had been made for the evacuation of a number of valuable books in the Wills Library as a precaution against loss in the event of war. It was further reported that the number of books under this scheme would be between 500 and 600. The Librarian was instructed to prepare a list and to inform the Dean of this decision. The Librarian was further instructed to obtain from a reliable insurance company a quotation for the premium to insure against all possible precautions, and to enquire from an outside firm the question of packing."

" *Meeting on November* 28*th*, 1939.—The Wills Librarian reported that, acting on instruction from the Hon. Wills Librarian before the outbreak of hostilities, he had packed 256 old and rare books in four wood boxes, lined with double waterproof paper. The Librarian, National Library of Wales, Aberystwyth, had kindly consented to accept the cases and place them in safe-keeping for the duration of hostilities. A letter dated September 14th, 1939, was received from the National Library of Wales that the cases had arrived safely."

In addition to these steps many of the more important books were stacked in as much safety as possible at the beginning of the war, but as the demand for reference to them grew, they were returned to the normal use of the Library. During recent weeks the Wills Library Committee have had again under consideration the question of moving a larger number of books to some place of relative safety, but Guy's men may rest assured that all the books of the greatest value or historic interest have already been removed from the Library.

Yours, etc.,
MAURICE CAMPBELL.

Orpington War Hospital,
Orpington,
Kent.

The Physical Society

To the Editor of the GAZETTE

SIR,—I read with interest a letter in the last publication of the *Gazette* appealing for the revival of the Physical Society at Guy's.

As your correspondents point out, Farnborough and Pembury have been holding Physical Society meetings for more than half a year. Our Society at Pembury was somewhat severely rebuked for daring to style itself " A Branch of Guy's Physical Society at Pembury." The Mother Society was obviously acutely conscious of her position and traditions.

We find it hard to understand that, with this consciousness, and having informed us that she was shortly about to resume activity, she was not stirred to an early revival, at a time when the facilities for learning were obviously few, and the Physical Society would have proved a great boon to the students stationed at Guy's.

While we appreciate that the call for a revival of activity may have come too late, may we voice our earnest hope that this is not so, and, having experienced the enjoyment and educational benefit derived from our meetings, send our full support to, and our best wishes for, the revival of the Mother Society.

Yours, etc.,
H. A. RIPMAN,
Hon. Sec., Branch of Guy's Hospital Physical Society, at Pembury.

Pembury, Kent.

Ladies in the College

To the Editor of the GAZETTE

SIR,—Whilst sitting at lunch on Wednesday 4th, I was surprised to see two unattended ladies at an adjoining table. I should very much like to know whether these women had permission to enter the College, and, if so, who granted this permission, and on what authority he did so ?

I have never been able to find anyone who knew the ruling, if such ruling there be, as to the admission of women guests into the public rooms of the College, but I have noticed that on the rare occasions when this has been done, the general consensus of opinion has been against the admission of women as guests.

I suggest, therefore, that the matter should be brought up at the next meeting of the appropriate body, and ruling made on this point ; or if such ruling already exists, it should be enforced.

Apart from this, I find it difficult to understand how anyone who is not a member of the Club and is neither a member of the staff nor an old Guy's man, can be permitted to lunch in the College,

except at the express invitation of a member of the Club, in which case the member is responsible for the behaviour of his guest and should presumably accompany him or her.

Your, etc.,

T. H. SPENCER SMITH.

Guy's Hospital S.E.1.

"The Young Surgeon After the War"

To the Editor of the GAZETTE

SIR,—Mr. Payne, and to a greater extent Mr. Layton, have taken my advice to young surgeons more literally than it was intended. My chief purpose was to condemn angular vein ligation, a procedure which has never been sponsored by any but the second-rate, but has been accepted by those who have not sufficient experience to distinguish brass from gold. In doing so I ventured to point out that to-day the publication of a book is no indication that the author has any standing, that his ideas are sound, that they are even his own—no indication, in fact, of anything but his wish to pose as a big shot. When Mr. Layton and I were students, textbooks were written by men of ripe experience and unchallenged reputation in their profession; many still are, but that is why the charlatan of to-day sees in the authorship of a textbook the means to assume a position he is never likely to get in the considered opinion of his colleagues. The same reasoning has brought every medical rogue and qualified mountebank to Harley Street, a place where a group of the best-known consultants chanced to live in the early years of the century, and where even now honest men preponderate. It may be that similar motives led Aron Schickelgruber to adopt Charlie Chaplin's moustache and Donald Duck's squawks of disappointed rage, mannerisms that have endeared the originals to millions.

Mr. Layton doubts whether such men exist. His young friends Atkins and Wass could tell him of four at any rate. Every third student who passes him in the Park is probably carrying a product of the scissors-and-paste factory. These surgical salesmen, with one exception, are not attached to teaching hospitals, and none is remotely associated with Guy's.

I am touched by Mr. Layton's apologies for his many writings and his big car. As he has discovered, I am not on the Register, but, though forced by schizophrenia to live a retired life on the Devonshire moors, I have followed with interest the careers of the bright young men at my old hospital. Those who know Layton best trust him most. Those who know him at all realise that he has never spoken, written or acted from any but disinterested motives, for what he believes to be the good of his students, his hospital and his profession. I would ask him to believe that my exposure of London's surgical crooks was written with the same end in view, as a warning to encourage our students to follow and our registrars to practise that honest thinking and honest work for which the Guy's School of Surgery has always been known, and towards the perpetuation of which Mr. Layton has himself done so much.

Yours, etc.,

Devonshire. DANIEL WHIDDON.

The Farnborough Reference Library

To the Editor of the GAZETTE

SIR,—Since the beginning of the war the Wills Library has lent us a number of books which provide us with a small reference library for the use of students working in this hospital.

During the last year about half of these have disappeared.

Without doubt they are being put to excellent use and cared for meticulously, but it is the opinion of the Students' Committee, on which I serve, and also of the Wills Library that the interests of Medicine would be better served if these treasure chests of learning could be made available to the many instead of the few.

May I therefore appeal through your pages to these now scattered "borrowers" to return these books to the Wills Library. They will be received gratefully and entirely "without recourse."

Yours, etc.,

E. J. TUCKER,
Hon. Librarian.

Farnborough Hospital, Kent.

Sport

Rugby

Guy's v. St. Bartholomew's Hospital

(At Honor Oak Park on Saturday, October 5th)

THE original fixture was with St. Thomas's, but as they could not raise a side, Bart.'s stepped into the breach and gave Guy's a very good game. Indeed, at one period it looked as if they would win. Guy's played with a strong wind behind them during the first half, but could only score three points, through a penalty goal by Mullins. This was neutralised by a try from Evans, to make the half-time score 3—3.

On resuming, Guy's had many anxious moments,

and, in spite of the excellent play of Harrett and Strathie, the three-quarters could make no impression on the Bart.'s defence. Harrett had made many efforts to break through, and eventually succeeded in scoring a try, which Mullins converted.

Bart.'s made several attacks and came near to scoring. The result was put beyond doubt when Fuller went over following a fine run by the forwards, and taking the final pass from Williams close to the line. As this try was not converted, the final whistle went with Guy's winning by the mixed bag of a goal, a try, and a penalty goal (11 points) to a try (3 points).

Team'—T. L. T. Lewis; P. C. Gartrell, D. W. F. Charlton, R. U. F. Kynaston (captain), R. F. Camp; D. M. Strathie, P. D. V. Harrett; A. G. Albers, C. Vidot, D. N. Fuller, J. R. D. Williams, J. C. Bulstrode, M. R. Mullins, T. Renton, C. Halamandres.

Guy's v. Charing Cross and the Royal Dental Hospital

(*At Honor Oak Park on Saturday, September 28th*)

GUY'S, entertaining the Charing Cross and Royal Dental XV, played very well to run out winners by 2 goals and 3 tries (19 points) to a goal (5 points).

Guy's were well served by Harrett at scrum half, Strathie at stand-off, Breen-Turner at centre, and Lewis at full-back. Strathie, making his first appearance, combined so well with Harrett that the outsides were given many opportunities of making it an open game. The forwards were very good in the loose and heeled well to enable Harrett to give a good service from the scrum.

Guy's led at half-time by 8 points to 5, Breen-Turner going over under the posts for Lewis to convert, and Lillywhite crossing in the corner. The opponents' score came from a long pass back, which Sank gathered to score in a good position, and Brown added the extra points. The second half was always in favour of Guy's, and successive tries were scored by Gartrell, Fuller and Renton, the latter following a fine cut-through by Strathie, who was almost on the line before passing. This try was converted by Williams.

Team.—T. L. T. Lewis; J. M. Hanson, W. H. Lillywhite, J. Breen-Turner, P. C. Gartrell; D. M. Strathie, P. D. V. Harrett; C. Vidot, R. M. Sharpe, D. N. Fuller, J. R. D. Williams, E. B. French, A. G. Albers (captain), G. MacVicar, T. M. Renton.

Hospital Information, etc.

Awards

O.B.E. (*Military Division*)

The O.B.E. (Military Division) has been awarded to Major Ralph Brooke, R.A.M.C. (T.A.), for gallant and distinguished services in action in connection with operations in Norway.

Papers by Guy's Men

Bulleid, Arthur. Treatment of dental cysts. *Med. Pr.*, 1940, **204**, 226.

Bennett, T. Izod, and Another. Chronic jejuno-ileal insufficiency. *Lancet*, 1940, *ii*, 381.

Ryle, John. On death and dying. *Ibid.*, 401.

Atkins, H. J. B. Treatment of chronic mastitis. *Ibid.*, 411.

Maizels, M., and Another. Survival of stored blood after transfusion. *Ibid.*, 417.

Bray, George W. Allergy. *Practitioner*, 1940, **145**, 249.

Macintosh, R. R. Recent advances in anæsthesia. *Ibid.*, 275.

Rake, Geoffrey, and Another. Pathologic changes following prolonged administration of sulfathiazole and sulfapyridine. *Am. J. Med. Sc.*, 1940, **200**, 353.

Changes of Address

F. D. Annesley, Lt.-Col. R.A.M.C., c/o Lloyds Bank, Ltd., Hornby Road, Bombay.

P. H. Denton, F/O R.A.F. (V.R.), Princess Mary's R.A.F. Hospital.

E. H. Rink, Major R.A.M.C., Moston Hall, Chester.

I. G. Robin, F.R.C.S., 77, Marlborough Mansions, Cannon Hill, N.W.6 (residential) and 16, Wimpole Street, W.1 (consulting room). Telephone 1171.

Births

LINGFORD—On September 25th, 1940, at Rosemount Nursing Home, Barnard Castle, to Jean Yuille (*née* Caldwell) wife of Kenneth Lingford—a son (Christopher David).

ROBIN—On October 5th, 1940, at 77, Marlborough Mansions, Cannon Hill, N.W.6, to Shelagh, wife of Ian G. Robin, F.R.C.S., a daughter (Shirley Elizabeth).

EDS. { N.A.N. B.S.L.

GUY'S HOSPITAL GAZETTE

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PASSIM

THERE has been much activity in and around Guy's during the last fortnight; as a result of London's concentrated defences, enemy raiders have been forced to carry out their bombing from great heights, a fact which not only makes military objectives relatively secure, but also exposes civilian population and buildings to extraordinary risks. For this reason the bulk of medical duties has fallen on the officers of the E.M.S. more than on any other service.

The Guy's sector, because of its geographical position, has surely done good service to the country by reason of its treatment of casualties no matter what their number, by reason of its treatment of civilian sick, and by reason of its continued education of new medical doctors. We can now face even more arduous tasks, if need be, with a good conscience.

SLOWLY but surely our Park is commencing to assume a more normal aspect and to resemble less and less the demolition dump of the past few weeks. Very soon, the familiar horse and cart will have finished the Herculean labour of removing the rubble; already huge baulks of timber have appeared, as if from nowhere, and seem to presage the rapid reconstruction of our staircase. The aerial attack has been generally less severe of late, but sporadically it has been intense; on occasions, our facilities for the reception and treatment of casualties has been taxed to capacity. The question has yet to be decided as to whether it is justifiable to utilise the first floor wards, if only for the reception and temporary treatment of casualties. If this can be answered in the affirmative, these wards would provide very welcome overflow accommodation. The ground floor wards of the old surgical block have already been adapted for the treatment of civilian sick. The type of cases to be admitted, both medical and surgical, must of necessity be only the most urgent ones, but the co-operation of the base hospitals makes possible the provision of necessitous in-patient treatment for cases seen here at out-patients. It has been found possible, moreover, to reinstitute regular teaching ward rounds, and thus to provide the ward clerk with a surer basis on which to co-ordinate his reading.

A RECENT circular letter has dealt with the use of prophylactic injections of anti-tetanic serum. At the commencement of the war, a dose of a thousand units was an average injection to be given to any case with a wound which could have been contaminated. This dose has risen up to three thousand units; at many hospitals, such treatment was given as a routine to every patient, however small the surface abrasion; at others, individual judgment was allowed to decide whether the injection was necessary or not. In the case of grossly contaminated wounds, a second prophylactic dose would usually be given at the end of the first week. An attempt has now been made to regularise the position; every air raid casualty, with a wound of any description, must now receive one initial and two subsequent doses of three thousand units at weekly intervals. It is not clear whether any discretion is left to the doctor in charge, to decide as to the necessity for such injections in any individual case; presumably he has no such choice, and would be held fully responsible should tetanus develop in any case that has not received the full prophylais now prescribed.

THE best holiday a man can have is to be happy and hard at work; but continued effort and concentration, especially on one theme, tends to

make one irritable and unco-operative, and in time judgment becomes impaired, resulting in a poor sense of relative values. To offset this menace, intervals of relaxation are necessary and in these days, when ordinary entertainment is almost impossible, it becomes the duty of those who are in charge of the work of groups of people to organise their rest as well as their work. To a large extent this has already been anticipated, and numerous "hops," gramophone recitals and variety performances have taken place; more of these ought to be encouraged and facilities for more conservative amusement provided for those who wish it.

ELSEWHERE in this issue is published a letter from Guy's Deputy Superintendent offering accommodation for one or two nurses, students or house officers at the homes of various "old" Guy's people; it is to be hoped that advantage will be taken of this offer.

IN Mr. Layton's review of Stephen Leacock's "Too Much College" the sentence, "The general surgeon, in the sense of ubiquitous, disappeared when he gave us sucking-leeches," should have read, "The general surgeon, in the sense of ubiquitous, disappeared when he gave up couching lenses."

Burns

By H. Atkins, Esq., M.S., F.R.C.S.

GENTLEMEN,—I have chosen the subject of "Burns" to talk to you about to-day because of its extreme importance in modern warfare. Severe degrees of burn are met with, particularly amongst Air Force casualties, from fire breaking out in the cockpit of an aeroplane. Often under these circumstances the back of the hands and the extensor aspects of the forearms are most severely affected, because the patient attempts to shield his face by covering it with his hands. Burns are common, too, in naval casualties, some following the ignition of oil floating on the surface of the water in which survivors from a wreck are swimming, and others from the escape of steam in the engine room of a torpedoed ship. The use of incendiary bombs has rendered this type of lesion common among civilian casualties, but burns from incendiaries have not been nearly so frequent as was anticipated.

DEGREES

Dupuytren divided burns into six degrees depending on the depth of tissue affected, and his classification is illustrated in the accompanying diagram (Fig. 1). Nowadays, because of the similarity in prognosis and treatment of the last four of these degrees, it is conventional to lump them all together and to designate any burn which penetrates the dermis or deeper as a "third degree" burn.

CLINICAL PICTURE

Primary Shock.—At any time up to about two hours after receipt of a burn the symptoms of primary shock may appear. This condition is characterised by collapse, and resembles precisely the clinical picture of a patient suffering from psychological shock, and like psychological shock it is neurogenic in origin. Except in the case of burns of wide extent, primary shock is unimportant and readily responds to warmth and the administration of sedatives. Sedatives are so important in the treatment of burns and scalds that it is necessary to have a clear idea of the dose likely to be required. The accompanying table shows the doses required at different ages and should be committed to memory. Primary shock is responsible for 2 per cent. of the deaths resulting from burns and scalds.

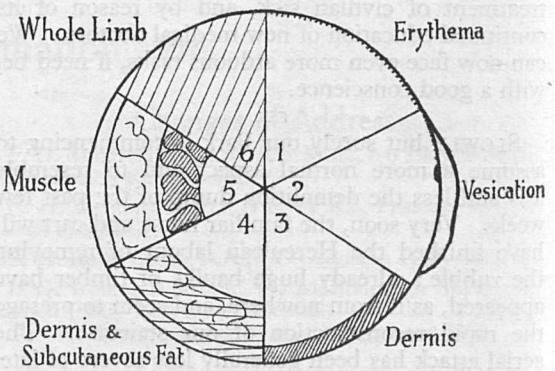

Fig. 1.

Degree's of Burn according to Dupuytren

Secondary Shock.—Between two and twenty-four hours after receipt of the burn the symptoms of secondary shock appear. The patient is apathetic, cold, clammy and grey. The respirations are shallow, except in severe cases where "air hunger" causes deep sighing respirations. The pulse rate is raised and the blood pressure low. The systolic pressure falls first, and only when

shock is well established does the diastolic pressure begin to fall. Consequently, one of the earliest and most important signs of shock is a drop in the pulse pressure. Secondary shock is the most serious factor in burns and is responsible for 80 per cent. of the deaths occurring in this condition. In a previous lecture I have discussed with you the causes of secondary shock, and I shall not be able to go into them in detail again now.

You will remember that the factors held to be responsible for this condition are (1) fluid loss both from the surface of the wound or burn and into the tissues around the lesion, and fluid lost through stagnation of blood in the dilated capillaries of the muscles; (2) painful nerve impulses; (3) an ill-defined and imperfectly understood abnormality of supra-renal function; and (4) the possibility that a depressor substance is elaborated at the site of the lesion. It must be observed that a burn constitutes a particular type of wound in that there is no external hæmorrhage or loss of whole blood, and that the fluid lost is only plasma. This leads to a concentration of the blood corpuscles, a factor peculiar to shock from burns, which still further aggravates the stagnation of the blood in the dilated capillaries, causing a severe degree of anoxia. The degree of secondary shock varies with the area involved, and is practically independent of the depth of the burn.

Treatment of secondary shock follows logically from a consideration of the symptoms and causative factors. The foot of the bed is raised and the patient should be warmed by means of hot blankets, hot-water bottles and, if possible, by an electric cradle. Sedatives should be administered according to the scale recommended in the table, and the fluid level should be restored by drinks of hot sweetened tea and, if necessary, by intravenous infusion of plasma. If plasma is not available gum-saline is an effective substitute. Infusion of whole blood is not very satisfactory in cases of burn because of the high degree of hæmo-concentration; while solutions of glucose or saline are absolutely contra-indicated at this stage because they leak out into the tissues, carrying with them plasma proteins, thus still further depleting the available supply. Oxygen should be administered, if possible, through a B.L.B. mask, and highly favourable reports have been received from the use of supra-renal cortical extract; two c.c. of the natural Cortin or five milligrams of the synthetic product desoxy-corticosterone injected intramuscularly. When the patient is sufficiently recovered as a result of these measures, the burnt area must be dealt with as described below in order to prevent further exudation of fluid and to control pain.

Toxæmia.—In from twelve to forty-eight hours the symptoms of acute toxæmia may appear. The patient becomes irritable, sometimes to the extent of delirium. There is vomiting, occasionally a tinge of jaundice and a trace of albumen in the urine. The temperature is raised and the pulse rate rapid. This condition is not commonly encountered under modern conditions, but when it appears is serious and is responsible for 15 per cent. of the deaths from burns. The etiology of this condition is obscure. The severity of the toxæmia does not bear so close a relation to the area involved as is the case with secondary shock. Cultures taken from the burnt area at this time are usually sterile, and it is thought that toxins are elaborated by protein autolysis at the site of the burn, which damage the liver and cause cell necrosis in this organ. The treatment is to stimulate liver function by the intravenous infusion of 5 per cent. glucose. It may be assumed that the patient has recovered from the effects of secondary shock in forty-eight hours, and at this time there is therefore no contra-indication to the administration of glucose intravenously.

Infection.—Many second degree burns which have been ineffectively tanned become infected. All third degree burns become infected because it is impossible to tan them effectively. Infection in a second degree burn is found only at a relatively late stage in the patient's history. After five or six days, and at any time up to about a fortnight, the crust of the tanning tends to separate at the edges and to crack in the middle. It is at these sites that infection is liable to be introduced. It will be seen from a description of the treatment of the local condition that measures are adopted to counteract this as far as possible. Should infection become established the infecting agent is nearly always the hæmolytic streptococcus and consequently M. and B. 693 is given.

Complications.—Broncho-pneumonia is common particularly after burns affecting the front of the chest and face, and it is thought that this complication is very probably due to the inhalation of heated gases or steam. Pulmonary œdema is likely to occur only if excessive sodium chloride is given in the intravenous drip. We have seen that the treatment for acute toxæmia consists in the intravenous infusion of 5 per cent. glucose. Because of the loss of chloride in the exudate from the burn and in the vomit, and in order to supply the bodily requirements, it is necessary to substitute 2 pints of normal saline for the glucose solution after 4 pints of the latter have been run in. If more than this amount of saline is given there is a tendency for salt retention to occur, and this will lead to œdema of the tissues, particularly of the lungs.

Duodenal Ulcer sometimes complicates deep

burns, but the mechanism of its formation is not clearly understood. It used to be thought that the toxic liver products excreted from the ampulla of Vater, irritated the duodenal mucous membrane and caused the ulceration. It is not likely that this is so, because ulceration is quite frequently met with in the stomach, giving rise to hæmatemesis, and in the jejunum. Also, when the ulceration occurs in the duodenum, it is the first part which is affected rather than the part opposite the ampulla of Vater. Other rare complications are jaundice, scarlet fever and acute nephritis.

Prognosis.—Under modern methods of treatment second degree burns involving 50 per cent. of the body surface usually recover, and often it is possible to save the lives of patients whose burns involve up to 70 per cent. of the whole body surface.

THE TREATMENT OF THE LOCAL CONDITION

First Degree Burns.—First degree burns are rarely very serious. The treatment consists in the application of sodium bicarbonate solution or hypertonic saline which will prevent vesication. Sedatives should be given, but the dosage will not be as much as that required by seriously shocked patients, and half the dose recommended in the table will probably suffice.

Second Degree Burns.—As soon as the patient has recovered sufficiently from secondary shock the burnt surface must be dealt with. A general anæsthetic is required, and the least depressing is probably open ether preceded by pentothal or gas and oxygen. The burnt surface should be gently but firmly swabbed with sponges soaked in saline. All dead skin should be removed, including that which covers the blister and the surrounding area. The most scrupulous asepsis should be observed, and any area which is not being operated upon should be covered by warm sterile towels to control loss of heat from the body surface. In scalds there are sometimes hairs growing undamaged from the denuded surface and these can be shaved without damage to the underlying dermis. The area is then swabbed with 1 per cent. gentian violet and when this is dry, a process which can be accelerated by means of an electric hair dryer, the area is swabbed with 10 per cent. tannic acid, followed by 10 per cent. silver nitrate, and the hair dryer is again employed to dry up the coagulum; this method produces immediately a firm, stable crust. No further applications are required subsequently, except each twenty-four hours the edges of the crust should be painted with 1 per cent. gentian violet to prevent infection. Other methods of coagulation are sometimes used. The method of slow coagulation by spraying with 2 per cent. tannic acid at repeated intervals and drying the area off in between is most unsuitable when many casualties have to be dealt with, because as many as twenty to thirty applications may have to be made at quarter-hourly intervals before the desired coagulum is achieved. There are, however, special indications for this type of coagulation and these will be dealt with below. The " triple dye " (gentian violet, brilliant green and acriflavine) has been used with success, but we do not yet know whether this will prove as effective as the tannic acid, silver nitrate method. Egg albumen, paraffin-wax and cotton wool, picric acid and a synthetic product called " Foille " each have their advocates, but I do not propose to discuss the disadvantages and advantages of these methods here.

On return to the ward the patient should lie as far as possible on unburnt areas. The burn should be protected from pressure of the bed clothes by a cradle, and a sedative should be prescribed as the patient regains consciousness. In a favourable case the crust will begin to separate in twelve to fourteen days' time, and when it has peeled off there will be a dry epithelialised surface underneath.

Certain types of burn require special treatment. If the burn is very severe in extent and the patient, on admission, is suffering from secondary shock, then a good plan is to immerse the patient, clothes and all, into a bath of 2 per cent. tannic acid at a body temperature. Pain will be relieved and the warm bath will do much to revive the patient, so that the clothes may be removed in the bath and further treatment then undertaken. For small second degree burns the blisters may be pricked and a firm pressure bandage applied, when, in most instances, the dead skin will be re-vascularised. In cordite burns, from the back-flash of gunfire, the area should first be bathed with 5 per cent. sodium bicarbonate solution and then the routine treatment instituted. Electric burns are characterised by complete inhibition of respiration and artificial respiration should therefore be kept up until unequivocal signs of death have appeared—that is, until rigor mortis has set in.

Certain sites deserve special mention. In burns of the face, the eyes and ears should be protected by cotton wool plugs smeared in vaseline before tanning is performed. The tanning should be by the slow method with 2 per cent. tannic acid so that a light crust only is formed which will not crack with movement of the face. Adults should be warned not to touch the area and children must have their hands tied. Burns of the eyes are liable to be followed by adhesions of the lids to

the conjunctivæ (synblepharon) and of adhesions of the lids to each other (ankyloblepharon). The eyes are washed out with sodium bicarbonate solutions many times a day, and once a day a glass rod covered in vaseline is passed under each lid to the limit of the conjunctival reflection. If the mucous membrane of the nose is affected, this should be syringed with 1.5 per cent. saline to which adrenalin solution, 1 in 1,000, has been added in the proportion of 2 minims to each ounce of saline. Burns of the neck should be splinted so that the burnt area is well stretched; this will prevent contracture deformities developing subsequently. The head and neck are immobilised by means of a back splint between the shoulders and a foot piece across the top of the head. If a limb is burnt it should be splinted in flection or extension, depending upon the site of the burn and in order to prevent contractures subsequently. If the whole circumference of a limb is involved, the crust should be split longitudinally twelve hours after it has been applied, so as to allow for the swelling of the limb which will occur at about that time. The splits will gradually widen and may be tanned again when full expansion of the limb has occurred in about thirty-six hours.

Fingers do not stand heavy crusts well, since constriction by coagulum is liable to produce trophic changes in the pulps, sometimes leading even to gangrene. In order to avoid this, a very thin coagulum should be applied with 1.5 per cent. tannic acid. If the whole circumference is involved, splits in the coagulum should be made as described above. Some surgeons, however, prefer to treat finger burns with saline baths and compresses for as long as a week before any attempt is made to tan them. By this time œdema will have subsided and all risk of trophic disturbance by a constricting coagulum is passed. In order to avoid the fingers sticking together they should be splinted in abduction by means of pledgelets of cotton wool soaked in tannic jelly and inserted into the clefts.

Burns of the perineum are troublesome condi-

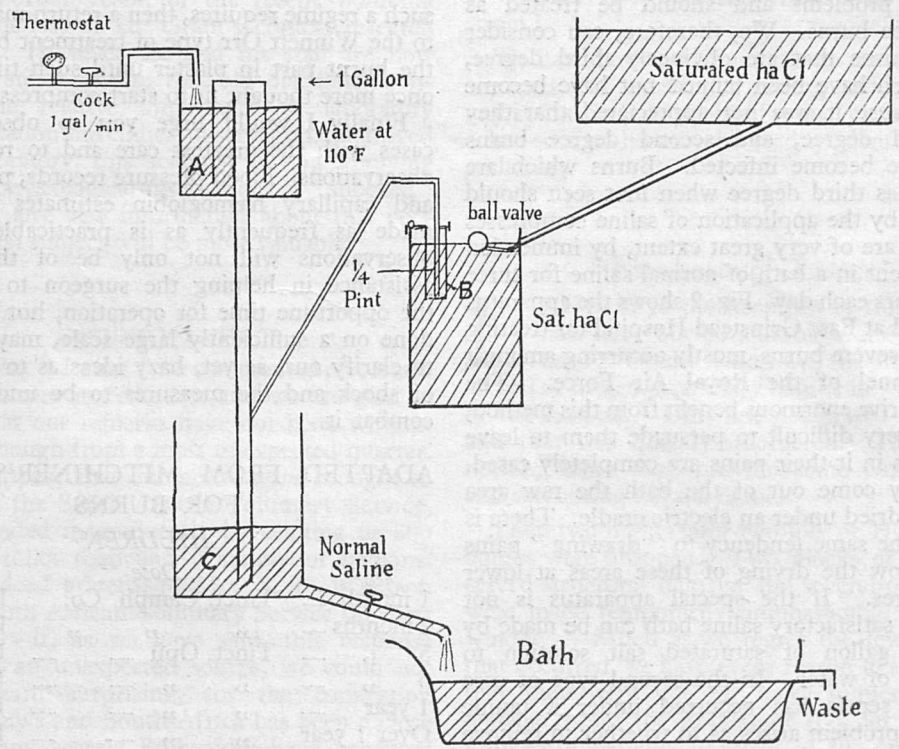

Fig. 2

Apparatus for Saline Bath.

Each minute the tank A becomes filled with water at 110 deg. F. When the fluid level reaches the outlet pipe the whole gallon is syphoned into container C, drawing with it ¼ pint of saturated salt solution from container B. Container B is thus momentarily emptied but refills itself through its floor which is made of fine-mesh wire gauze.

tions to nurse. Children are best treated in a Bryant's suspension. Adults should have the legs splinted in abduction. A daily enema will usually avoid soiling the coagulum. When a patient is badly burnt on both surfaces of the body it will be impossible to prevent them from lying on some part of the burnt area. If this cannot be avoided, clean towels should be lain over the sheets and the mackintosh draw sheet dispensed with, otherwise perspiration will tend to render the coagulum sodden.

Third Degree Burns.—A third degree burn affects the true dermis or deeper structures. It is often impossible on first examination to be sure whether a burn is, in point of fact, second or third degree. Signs of charring and a dead white escharotic appearance indicate that tissues have been damaged deeply. More often than not the degree is only apparent when it is found that firm coagulation is not possible and sloughing of tissues takes place underneath it. Another point to appreciate is that second degree burns which become septic underneath the coagulum present the same problems and should be treated as third degree burns. We, therefore, can consider together burns that are obviously third degree, burns which have been tanned but have become septic because it was not appreciated that ithey were third degree, and second degree burns which have become infected. Burns which are diagnosed as third degree when first seen should be treated by the application of saline compresses or, if they are of very great extent, by immersion of the patient in a bath of normal saline for three or four hours each day. Fig. 2 shows the apparatus that is used at East Grinstead Hospital for treating these very severe burns, mostly occurring amongst the personnel of the Royal Air Force. The patients derive enormous benefit from this method, and it is very difficult to persuade them to leave the bath as in it their pains are completely eased. When they come out of the bath the raw area should be dried under an electric cradle. There is not then the same tendency to " drawing " pains which follow the drying of these areas at lower temperatures. If the special apparatus is not available a satisfactory saline bath can be made by adding 1 gallon of saturated salt solution to 32 gallons of water. In the second type of case in which sepsis has occurred under a tannic crust, the problem arises as to whether to remove the crust or to leave it in place. There is no doubt that the raw area following these septic or third degree burns should be subjected to skin grafting as soon as possible. This prevents scarring and contractures which are the most dreaded consequences of such a lesion, and in order that the granulations should be rendered suitable to receive the skin graft, the crust should be removed and saline compresses applied to the part, or, alternatively with extensive areas, saline baths should be used. Granulations should only be skin grafted when they are flat, pink and painless, and this state of affairs will never occur under a septic coagulum. On the other hand, removal of the coagulum means frequent changes of dressings which may exhaust the patient and requires adequate nursing facilities. The removal of the crust in itself does not contribute in any way to exorcising the effects of sepsis. The temperature is not lowered thereby nor is the pulse rate diminished, and it would seem that as far as the general condition of the patient is concerned, it would be better to leave the crust where it is. It should be removed, however, as soon as the general condition of the patient permits it so that the beneficial effects of a skin graft can be quickly applied after a preliminary period of compressing. If, because of sepsis from a large area, it is found that the patient cannot stand the repeated changes of dressing which such a regime requires, then a return may be made to the Winnett Orr type of treatment by encasing the burnt part in plaster until such time as it is once more thought fit to start compresses.

Finally I would urge you to observe these cases with the greatest care and to record your observations. Blood pressure records, pulse charts and capillary hæmoglobin estimates should be made as frequently as is practicable. These observations will not only be of the greatest assistance in helping the surgeon to determine the opportune time for operation, but if they are done on a sufficiently large scale, may well help to clarify our, as yet, hazy ideas as to the nature of shock and the measures to be undertaken to combat it.

ADAPTED FROM MITCHINER'S TABLE FOR BURNS

CHILDREN

Age	*Dose*	
1 month	Tinct. Camph. Co.	℥ iii
2 months	,, ,, ,,	℥ vi
3 ,,	Tinct. Opii	℥ $\frac{1}{3}$
6 ,,	,, ,,	℥ $\frac{3}{4}$
1 year	,, ,,	℥ iii
Over 1 year	,, ,,	℥ ii for each year

ADULTS

12-20 years	Tinct. Opii	℥ xxx
Over 20—		
Men	I.M.H.	gr. $\frac{1}{3}$-$\frac{1}{2}$
Women	,,	gr. $\frac{1}{4}$-$\frac{1}{3}$

Sector News

Guy's Letter

GUY'S candidates have been more than usually successful at the recent qualifying examinations and now they are being appointed throughout the sector as house officers. While personal preference is undoubtedly being considered, there are many other factors guiding their distribution to the various base hospitals. It is to be hoped that each one will find happiness in his new appointment; to the new arrivals at Guy's we extend an enthusiastic welcome.

Now that Martha and Dorcas wards have been reopened, there is an abundance of clinical material available for teaching rounds. A new institution is a combined round held by Professor Ryle and Mr. Atkins; during these rounds both the medical and surgical aspects of suitable cases are discussed; such teaching should prove of immense benefit to students and house officers.

One important result of the recent bombing has been the loss of Dr. Grant's clinical research laboratory. However, he and his staff are now providing an answer to that old discussion concerning the relative importance of laboratory experimentation and clinical observation. Deprived of his laboratory, this scientist is now applying himself to physiological observations of "shocked" casualties; any new information about this very controversial subject will be most valuable.

B. L.

Pembury Letter

IN a recent "Letter" we commented on certain deficiencies at Pembury, and we are glad to say that our remarks have not been without results, although from a most unexpected quarter. It would appear that our needs were brought to the ears of the South African Voluntary Service, who responded magnificently by sending us 500 tablets of toilet soap and a supply of napkins. We are indeed grateful to Mrs. S. F. Waterson and the South African Voluntary Service for their generosity. If, as we have said, this response came from an unexpected source, we could not use the term surprising, for the connection between Guy's and South Africa has been a close one for many years. Both sides have benefited from the association, but we feel that this gift expresses the warm feelings many South Africans must feel for their Alma Mater in the hour of her trial.

In the same "Letter" that produced the above-mentioned results, we mentioned that there was a shortage of clothes in our Children's Hospital, but we have since had it impressed upon us that there was in effect an adequate supply of clothes, only they were locked away, and our source of information was not aware of their existence. We must, therefore, express our regret at this error which was made in good faith. We have been vehemently informed that clothes are the *one* thing that can be easily obtained at Pembury, and we feel the emphasis is not out of place.

We regret to announce that our Deputy Superintendant, Mr. J. J. Bell, has recently had an argument with his car, in which he got the worst of the bargain. Fortunately, there were no serious injuries on either side, and we look forward to having him back again soon. In the past he has been a tower of strength in the smooth running of the Hospital; but we admire him most for possessing a pelvis which can unaided support a "Morris 8" and not show even a sign of strain!

We have now welcomed a large number of new students, and teaching is getting under way. On any round it is advisable for the patient to wear a hat so that he may be readily identified in the gathering.

N. M. J.

Farnborough Letter

LIKE most of the hospitals in this sector we now have our honourable scars. Our first taste of enemy action was the simultaneous arrival of fifteen incendiary bombs in various parts of the hospital. Only one penetrated a building and that was quickly smothered. The rest did nothing more than provide some entertainment and something to take home.

Then two nights later two lots of H.E. and oil bombs were dropped. Two blocks of wards received structural damage and several other wards were made temporarily uninhabitable by broken windows. Much as we regret the few casualties that occurred, we have every reason to be thankful that they were not far more numerous. The damage meant the immediate transfer of a large number of patients to wards at the other end of the grounds, which could only be done by ambulance. The work was made more difficult by the darkness and pouring rain, but with any amount of help from both inside and outside the hospital, it was rapidly emptied. Next morning a host of workmen began to clear the debris with remark-

able speed, and by the evening it was almost a surprise to see any evidence of the previous night's damage

A scare occurred more recently when, one morning, a nurse put her foot into a hole in a small lawn in the middle of the hospital, and looking down, discovered to her horror what appeared to be the outward and visible sign of a time bomb. Some sceptics queried whether the hole had been there before she put her foot down, but the advice of the more tactful prevailed, and neighbouring wards were evacuated and a bomb disposal squad summoned. However, a few minutes digging served to convince that nothing was there, and the origin of the hole remains a mystery.

G. L. L. R.

Correspondence

"Rest Periods"

To the Editor of the GAZETTE

SIR,—I have received letters from old Guy's men and friends of the Hospital living in relatively quiet areas not too far from London offering one or two good nights' rest to those of us who are working at Guy's under these rather trying conditions of nightly bombing. In order to make it possible to get out of London for such absolutely essential rest periods, I have tried to arrange the work of the Hospital as far as is possible into 48-hour periods, and have done my best to encourage people to get away during their 48-hour off-duty periods.

If anyone has nowhere to go, he or she has only to come and see me or Miss Wittrick, the Acting Matron, and we shall be able to provide the address of a family where a welcome and a rest will be assured. Some hosts have offered accommodation for one, some for two, and they are prepared to receive a married couple even though one of them is not working at Guy's.

I have at present six such offers, but I would be grateful of others of a similar nature. I can assure the hosts that anyone who is sent to them comes on the personal recommendation of Miss Wittrick or myself, and realises that we are making ourselves personally responsible for his or her good behaviour.

Yours, etc.,

P. M. F. BISHOP,

Deputy Superintendent, Guy's Hospital.

Guy's Hospital, S.E.1.

Sector News

To the Editor of the GAZETTE

SIR,—The Sector News Letters have, for more than a year, entertained us to local gossip and sectorial (lovely word!) scandal and your Pembury correspondent in particular has maintained a running commentary with amazing continuity of purpose and fair approximation to veracity. And I am happy to have this really public opportunity of thanking him for the many charming references he has made to the county hospital at Pembury and its staff. We were all delighted to read for example that we have a healthy body covered with festering sores—delightful incongruity!! We really do prefer to be described as the jewel in the Sector or the oasis in the in the desert of Kent rather than a septic smudge on the fair face of nature.

The Sector news has however contained the observations of Guy's correspondents and I venture to submit has of necessity been somewhat lop-sided, with no compensatory murmur or contradiction from those who are on the 'Accipere' side of the motto.

The Maids and Men, Kentish and of Kent, have received so much that there may be more truth in the motto than we at first perceived. So many things complicated the gifts we received in such profusion from the Guy's Cornucopia—the bevies of nurses with no place to put them, the hordes of Students and no ash trays for the corridors, the cream of the senior and junior staffs and nothing for them to. And we were delighted to welcome them all. Considerable trauma resulted from the inadequacy of staff accommodation, but a dining room sufficient for our modest peace time requirements for fifty nurses will not and could not accommodate an additional hundred or so Guy's nurses as well. Nor could bedrooms be rendered indefinitely elastic. In order to provide bedrooms for the Guy's Sisters however, many of the Pembury Staff cheerfully relinquished their own rooms and two nurses have shared bedrooms (11 ft. by 9 ft.) for over a year. The solution of the dining and recreation room problem is, I believe under consideration by the Ministry.

The training of probationers, a subject apparently simply bristling with difficulties, has also led to some confusion and administrative difficulty. I join your correspondent on dangerous ground when I remark that as far as I know all nurses work for the same state examination from the same syllabus, and I imagine could equally well be signed up for their particular ward duty by any competent Ward Sister, Guy's or otherwise. In which case the strict preservation of the Guy's ward, with their, to my mind, excessive number of nurses, would be unnecessary. I am quite prepared to admit that the Guy's sisters can teach us a lot (I learned no end of things from them when I was at Guy's!!) but I maintain equally firmly that we at Pembury also have much good to impart. Miss MacManus will, I know take me to task and refer to personal preference, individual hospital methods and tradition and I shall yet be unconvinced, and without wishing to appear for one moment disloyal, I believe we miss much at Guy's from perhaps a too strict adherence to tradition and the lack of a more widely directed outlook.

But, back to N.M.J. and the Anniversary Pembury Letter.

Few of the Originals remain at Pembury, both K.C.C. and Guy's Staff, but to the more recent arrivals we extend our welcome and we hope you will be happy, as in fact we have been. If N.M.J. can only comment on extremes—the major problem of Ministerial Policy at one end and soap in the Children's Ward at the other, I like to feel that things in the middle can't be too bad. And in the little matter of soap, clothes for the babies and napkins!!! One bar of yellow and two tablets of soap were actually supplied, a temporary restriction due to delay in supply that has occurred once in a year. Clothes for the tinies were supplied as soon as the request reached the proper quarter. Somehow the *Gazette* seems hardly appropriate as a medium for the requisition for ward supplies; it only appears at intervals of two weeks and leads to unnecessary delay! As for napkins in the Maternity Wards, over 1,000 have been issued. Of course, there is a tendancy to adopt such handy little squares as dusters—when the nurses are exhausted with tearing up sheets for that purpose—or have the pædiatricians, hoist with their own petard, produced such intractible diarrhœa that the laundry, turning out 500 a day has failed to keep pace with their demands? The Ward Sisters have, however, reported neither diarrhœa nor shortage—only the dusters!!

What N.M.J. has not reported are such trivial things as breakages—53 cups in the Children's Wards in two weeks—lost equipment from the Wards—with no conveniently placed Down Bros, for surreptitious replacements—the extravagant expenditure of dressings, and in very small print, the alarming dissolution of glass syringes and clinical thermometers!!! We've never had such fun since the Armistice!!!

The major problem of the E.M.S. is a different matter. There can be no doubt that it has been a striking success, witness the Dunkirk evacuation, when at a moments notice the entire plan of the Sector was reversed, literally base over apex, and in the basic principle of London and Provincial Hospitals working in harmony is so obviously a good thing that I hope it has come to stay. Who should control such an enterprise is much more difficult of solution, but I have an idea that State Medicine will be very well represented on the Board of Management.

The difficulty of finding accommodation for the senile and chronic patients is always with us, but there is, after all, a war on, and much of the previous accommodation, particularly in Kent, is now either non-existent or has been appropriated for casualties or for Service patients, while healthy children can hardly be sent back to the heaps of rubble that once were their homes in the Boro'.

I can assure N.M.J. that these problems have not by any means been overlooked, and if the wheels of State move slowly, we should be thankful that they move at all.

Yours, etc.,

E. D. GRASBY.

Pembury.

Ladies in the College Dining Room

To the Editor of the GAZETTE

SIR,—Mr. Spencer-Smith (*Gazette*, Oct. 19th) was horrified to find two unattended ladies in the College Dining Room and asked for an explanation of the phenomenon. The ladies in question are members of the Guy's Fellowship Class. The Clubs Union has agreed to grant temporary membership of the Students' Club to members of this class, in return for which a fee is paid to the Clubs Union from the composite fees of the Fellowship candidates. The School Council has agreed to accept two female students in each Fellowship Class, and without any specific ruling, the privilege of temporary membership of the Students' Club has been extended by courtesy to such female members of the class.

With regard to the general question of female guests in the rooms of the Students' Club there

is no specific ruling. The word "guest" in the rules of the Club has been accepted in its widest sense, and I very much doubt whether anything is to be gained by Mr. Spencer-Smith's agitation for a "ruling" on the subject. It is so uncommon to see female guests in the public rooms in the College that it is evident that there is no abuse of the privilege. It would be difficult to bar adoring mothers from inspecting the conditions under which their fond sons live; on the other hand, I am sure that the tact of most members of the Club is such that entertainment of their female friends in general will be carried out either during certain stated hours in the private rooms of the College, or else in places remote from the Hospital itself.

Yours, etc.,

S. H. WASS,

Hon. Sec. Students' Club.

Guy's Hospital, S.E.1.

Health among the Staff

To the Editor of the GAZETTE

SIR,—In the present circumstances and under the conditions in which the Hospital staff, including all students and nurses, are living, I feel, in common with the majority of people, that the risk of illness is a very real one.

I would, therefore, like to suggest that a three-monthly routine X-ray examination of the chest should be performed upon all the people working at Guy's. The general health of such people and their resistance to infection are bound to be lowered by the unavoidable conditions under which they live, and the examination which I suggest might lead to an early diagnosis of pulmonary tuberculosis, which might otherwise be undetected and cause danger to others.

I also hope to see the revival of the artifical sunlight treatment which was in operation last winter. It should not be a difficult matter to arrange regular times for this treatment for all members of the staff, in particular for the nurses, without encroaching upon their times of "off duty."

To anyone who has been down in the Underground stations in the evening during the past few weeks, it must be apparent that epidemics are to be expected. It is, therefore, the duty of medical and nursing professions to keep themselves as fit as possible to cope with such emergencies without succumbing to infection themselves.

Yours, etc.,

J. H. G. HALLIDAY.

Guy's Hospital, S.E.1.

"Too Much College"

To the Editor of the GAZETTE

SIR,—In the course of his review of Stephen's Leacock's 'Too much College', T.B.L. has seized the opportunity to expound his own views on the apparently deplorable state of certain aspects of medical education. Among the victims of his onslaught is the subject Physiology which he suggests has 'run to seed,' places the student completely under the control of the 'bunny-rabbit' and stops short at the human being. Either T.B.L. is very much out of touch with the present-day teaching of this subject or his ideas are suffering from that very over-ripeness with which he stigmatises Physiology. It might interest T.B.L. to know that in his own school 50% of the practical exercises are carried out on the students themselves in Physiology and the whole of the work in Biochemistry is carried out on material that may be of human origin or used for human consumption.

The value of a wide biological basis on which to found medical training is beyond dispute. The dangers of a narrow viewpoint concentrated on 'Homo Sapiens' are not so frequently stressed but such an outlook would certainly lead to one of those 'pigeon-holes' against which T.B.L. loudly declaims. Pioneers must 'wander out into the wilderness' before it can be reclaimed; is it possible that T.B.L. does not quite appreciate the extent to which parts of the physiological wilderness have been cultivated since the days in which he presumably shunned it?

It is an axiom of medical education that the study of the normal should precede that of the pathological. A medical student, even in the period of pre-clinical study, meets 'all sorts and conditions of men', types probably far more numerous than were encountered by the old-time apprentice whose contacts where limited mainly to a few sick. The foundations of a knowledge of human nature are probably laid more securely by this progressive mingling in the ordinary walks of life than by the more precipitate plunge into the mælstrom of sickness and suffering.

No, Sir, Physiology can be of greater service to medical education by pointing the lessons of the humble frog, rabbit and cat as stepping-stones to man and by continually digging in the wilderness than by binding herself with the strictly utilitarian bonds of T.B.L. and burying herself in one of his pigeon-holes.

Yours, etc.,

W. R. SPURRELL.

6, Sandrock Road,
Tunbridge Wells.

Reviews

Landmarks and Surface Markings of the Human Body. By L. BATHE RAWLING, M.B., B.Ch. (Cantab.), F.R.C.S. Published by Messrs. H. K. Lewis & Co., Ltd. Eighth Edition. *Price* 8*s*. 6*d*.

SURFACE anatomy is at all times an important subject, but, at the present time, when perforating injuries and lacerated wounds, produced by metallic foreign bodies, glass and falling masonry are so distressingly common, it gains an added significance. The surgeon must be familiar with the structures which are likely to have perished in any such injury—on the one hand that he may test for their involvement before operation, and on the other that he may not damage them during the operation. A place for works on surface anatomy is, therefore, fully justified, and students should make themselves familiar with the surface markings of the more important structures.

This small book contains a fund of useful information set out in a concise, if not always grammatically correct, manner. The section on cranio-cerebral topography is particularly illuminating, and should prove of considerable value to those who may be called upon to deal with war injuries of the head.

A few inaccuracies should be pointed out. The line of the lateral supra-clavicular nerve is by no means a continuation of that of the anterior cutaneous nerve of the neck, for, while the latter runs in the horizontal plane, the former proceeds downwards and backwards. On page 33 the ulnar nerve is described as lying medial to the tendon of flexor carpi ulnaris; this relationship should, of course, be reversed. The author states that the first costal cartilage can be felt with ease as it lies below the sternal end of the clavicle, but I think most people will agree that it can be felt only with difficulty in this situation. Finally, the innominate veins are usually found behind the sternal ends of the clavicle rather than behind the sterno-clavicular joints.

The illustrations are clear, though it is a pity they are quite so artificial. The square cut given to the proximal ends of the radial and ulnar bursæ offends the anatomical eye and induces an unnatural conception of these structures.

The appendix at the end of the book is useful, and it is particularly pleasant to see that a description of the ossific centres of the bones of the extremities has been included.

This book is certainly deserving of consideration by all who are interested in the subject. Most of the criticisms advanced are of minor consequence, and are more than counteracted by a wealth of information which can be assimilated in a gratifyingly small space of time.

H. R. H.

A Handbook of Radiography. By JOHN A. ROSS. Published by H. K. Lewis & Co., Ltd. *Price* 7*s*. 6*d*.

THIS Handbook is a brief and rather sketchy resumé of modern radiographic technique. The first part of the book would be found a useful addition to the student's usual radiography textbooks, the chapters dealing with the care and treatment of patients has advice for everyone who practises radiography. The later chapters, with the exception of some useful methods of localising foreign bodies, do not appear to deal in sufficient detail with the subject in hand, and therefore are of little use to any student who is without a good practical knowledge of radiographic technique.

This handbook is intended to be brief and to gain the end the author has sacrificed much in the way of explanatory detail. Practical radiography has so many variations and alternatives that it is impossible to state any one rule to satisfy all radiologists and to be suitable for use with all patients; it is this factor which is liable to deter a brief handbook, useful as it is in many ways, from becoming widely used as a textbook for students.

C. J. R.

An Introduction to Pharmacology and Therapeutics. By J. A. GUNN. Published by the Oxford University Press, London (Humphrey Milford). Sixth Edition, 1940. Pp. 242. *Price* 6*s*.

ALL medical students, whether starting their pharmacology course or revising for the Finals, will find this book an invaluable aid in their studies. Professor Gunn has succeeded in enclosing in 242 pages of very readable English a general account of the commoner drugs, not as in synopses, by condensation and small print, but by careful selection of the material. Chief attention is paid to those drugs in common use in medicine, but almost every drug in the pharmacopœia has, at the least, an honourable mention. Throughout the book the emphasis is laid on therapeutics.

In this new edition have been included the new drugs discovered since the previous edition ap-

peared four years ago; more than twenty additions have been made, and the book is fully up to date.

M. L.

Neuro-Syphilis. By C. WORSTER-DROUGHT. Published by Messrs. John Bale, Sons & Staples, Ltd., London, 1940. *Price* 10*s.* 6*d.*

THIS book is a short monograph giving a comprehensive account of the various manifestations of syphilis of the central nervous system. The classification adopted is the familiar clinical one, and an attempt is made to correlate the clinical picture with the morbid anatomical and histopathological appearances. The author has a wide personal experience of the subject and has thus been enabled to avoid controversial topics and to present a unified and simplified picture of the conditions which may be encountered. At the same time, frequent references to the more important literature present the opposing points of view on many subjects which are not as yet clearly defined. This presentation certainly facilitates the approach to this important branch of neurology for the student, and also simplifies the indications for the different forms of treatment. Considerable emphasis is laid upon prognosis and upon the criteria of cure after treatment. The text is pleasantly presented and the microphotographs are clear and adequate. In the diagnosis of neuro-syphilis and in the differential diagnosis, so many other neurological conditions must be considered, from hysteria to Freidreich's ataxia, that a book such as this presents an interesting approach to neurology; it is certainly well worth reading by anyone who is about to do the neurological appointment.

N. A. N.

Textbook of Psychiatry for Students and Practitioners. By HENDERSON and GILLESPIE. Published by Humphrey Milford. Fifth Edition, 1940. *Price* 20*s.*

THIS textbook is written primarily for the student and the general practitioner; to this end every effort has been made to present the subject in as simplified form as is possible. It is not, however, an easy book to read, and to master it requires an effort of time and concentration greater than the average student is willing to spend. It does, however, present a subject that is admittedly difficult in a way that is both intelligible and stimulating; to the student who is interested in psychiatry it is an admirable introduction; to the practitioner who is always encountering the minor mental disorders, it gives the opportunity of understanding more fully the mental make-up of his patients. The psychiatrist himself will gain most interest from this book, for he alone is in the position to criticise or appraise the text.

The approach to the subject follows the American school in adopting a biological point of view—that is, that mental illness represents the cumulative result of unhealthy reactions of the individual mind to its environment. The official English and American classifications of mental disorder are compared, and a simpler scheme, again following Meyer, is suggested and followed throughout the book, similar essentially to that adopted by the Royal College of Physicians. In this latest edition, a detailed summary of the insulin and cardiazol forms of therapy is introduced and their comparative value assessed, so far as figures as yet available will allow. The psychopathic states are considered in a chapter of their own, distinct from that on Mental Deficiency and the question of heredity in mental disease is considered in greater detail. The book is well worth reading for any who have the time and whose interest in mental disorders extends further than their liabilities and responsibilities imposed by medico-legal requirements and certification.

N. A. N.

A Text-book of Bacteriology. (Third Edition.) By R. W. FAIRBROTHER, D.Sc., M.D., M.R.C.P., Director of the Clinical Laboratory, Manchester Royal Infirmary, and Special Lecturer in Bacteriology, University of Manchester. Published by Messrs. Wm. Heinemann (Medical Books), Ltd., London, 1940. Pp. 451. Illustrated. *Price* 17*s.* 6*d. net.*

IT will be noticed that from the title of the now well-known text-book the word "medical" has been omitted. The reason given is that the contents have proved useful to junior students of bacteriology in faculties other than medicine. Though a small matter, the omission is not entirely an advantage since the new edition embodies only very minor changes, introduces no new non-medical matter, and as a text-book remains essentially medical in character. It would be a pity if the medical student came to view any part of the author's very skilful summary of a vast subject as non-essential to his particular profession. So many of the conditions he is required to understand originate directly or indirectly from the activities of bacteria.

In the new edition each section has, where necessary, been brought up to date. Thus several aspects of the newer forms of chemotherapy are discussed together with their relation to other, particularly immunological, forms of treatment. Where recent progress has been made in more clearly distinguishing pathogenic and saprophytic strains within the same group of organisms, the new position is clearly outlined. On the same

principle various additions have been made to the section on virus diseases. The book thus remains a most competent survey of the essentials of medical bacteriology, clearly written and well produced. If, as a reviewer of a third edition, one seeks for improvements which might possibly have been made since the original publication, they would concern the practical applications of bacteriology; not those encountered in the laboratory, which have been most adequately dealt with, but those so often met with during bedside discussion. This aspect of the science intimately concerns every medical man throughout the whole of his professional life: few will ever take part in the actual laboratory work. Thus one feels that the author might have somewhat relaxed the pressure of condensation when describing some of the less obvious of the clinical applications of the bacteriologist's work. There is, however, no doubt that in this book the reader is presented with all the essential facts set out in a manner providing a happy blend of interest during continuous reading and speed when reference is made to any particular bacteriological point, advantages which fully justify its continued popularity. F. A. K.

Prevention of Venereal Disease. By MARIE C. STOPES, D.Sc., Ph.D. Published by Messrs. Putnam & Co., Ltd., London, 1939. Third Edition. Pp. 62. *Price* 2*s.* 6*d.*

THE need for a more general understanding of the venereal diseases cannot be denied; a publication on the subject by Marie Stopes is certain to have wide attention. It is, therefore, unfortunate that this little book is badly proportioned and fails to produce a real solution of the problem. It labours the horrible end results of some untreated cases, without making it clear that these are the outcome of neglected treatment; it enlarges on the value of immediate cleansing and disinfection to the extent of engendering a false sense of security, especially when it is realised, and Miss Stopes acknowledges this, that illicit intercourse is often the result of insobriety when efficient cleansing will be problematical. The book belittles and even casts doubt on the success of full medical treatment, and, as a third edition, shows little evidence of being brought up to date in the light of recent advances in treatment.

Amidst a certain amount of repetition, several important points are, however, made; for example, the book refers to the unreliability of the sheath, the dangers of the "amateur"—even one who protests "perfect virgin innocence"—the existence of free clinics, and the importance of seeking medical advice if there is the slightest doubt of infection.

It is apparent that great care has been taken in the preparation of this book, which has been written "in defence of the holy citadel of marriage," but it is doubtful to what extent illicit intercourse can be controlled by painting the horrors of the infections which might result. Miss Stopes says that "The reason why right is done in this world is seldom because of the risk of suffering or the fear of hell, but because it is natural for human beings to love that which is right," and yet a large part of this book aims at controlling the problem by detailing possible suffering. It is stated that youth is taught that all sex life is debased, a thing to be ashamed of, and that they infer since all is wrong, degrees of wrongness in it are a trifle so that "laxity of conduct, in or out of marriage, is of no supreme consequence." This latter opinion is given but passing attention, and yet it would suggest that the problem could be best approached through better education. Miss Stopes says "at first . . . I shrank even from acquainting myself with the utterly detestable facts," and this has too long been the attitude of the community. The problem requires more intensive propaganda campaigns and publicity for, with higher ideals and a frank recognition that such diseases do exist, it is probable that prevention would advance as rapidly as the treatment has done in recent years. D. E.

Sport

Rugby

Guy's v. London Hospital

(At Hale End on Saturday, October 19th)

WAR-TIME football has given the Hospitals a wonderful opportunity of meeting in friendly rivalry in an atmosphere so entirely different from Cup matches. When Guy's visited London Hospital's ground it was the third game in succession against London Hospitals, all of which have been thoroughly enjoyable. Neither side could field their full strength, and, in addition, Guy's borrowed two London players owing to the late arrival of some players from the Sector Hospitals, who were held up by an "alert."

Guy's led at half-time by two tries to nil, the first try being scored by Camp, who just managed to touch down following a three-quarter movement all along the line. Lewis later ran clean through the London defence when Guy's took

advantage of a loose ball. Neither try was converted.

After change of ends both sides exerted much pressure until Strathie made a brilliant solo run to score a most spectacular try, which Mullins had no difficulty in converting. London's try came in the last second of the match, scored by Barnes, and then the final whistle went with Guy's the winners by 1 goal 2 tries (11 points) to 1 try (3 points).

Team.—Barclay (London); P. C. Gartrell, T. L. T. Lewis, R. U. F. Kynaston (Captain), R. F. Camp; D. M. Strathie, H. A. Ripman; R. M. Sharpe, W. F. Osmond, J. P. Rochford, J. R. D. Williams, A. Forward (London), M. R. Mullins, G. MacVicar, T. M. Renton.

Hospital Information, etc.

Notice

SOCIETY OF APOTHECARIES OF LONDON

The Society's Examinations for the month of November are as follow :—

Surgery, Nov. 11, 13, 14.

Medicine, Pathology and Forensic Medicine, Nov. 18, 20, 21.

Midwifery, Nov. 19, 20, 21, 22.

Mastery of Midwifery (Post-Graduate), Nov. 11, 13, 14.

Pass List

CONJOINT BOARD
October, 1940

Pathology

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R. M. Sharpe
C. C. Spicer
A. W. P. Stone
J. Williams
D. H. Wright

* Have now completed the Examination.

SOCIETY OF APOTHECARIES OF LONDON
PRIMARY EXAMINATIONS
October, 1940

Materia Medica, Pharmacy and Pharmacology

W. C. Salter

Anatomy

P. L. G. Cole
A. M. Earle
J. H. S. Scarlett

Physiology

P. L. G. Cole
A. M. Earle

Papers by Guy's Men

Barber, Hugh. Confusion of the Myocardium. *Brit. Med. J.*, 1940, ii, 520.

Layton, T. B. Evacuees' Sore Throat and Shelter Tonsillitis. *Ibid.*, 531.

Lane, Ronald E. Medicine in Industry. *Ibid.*, 531.

Changes of Address

A. M. G. Campbell, Sq./Ld. R.A.F., R.A.F. Hospital, Ranby, near Sleaford, Lincs.

C. H. Housden, L.D.S., R.C.S., Dutton House, Leominster, Herefordshire. Telephone: Leominster 42.

A. H. Knight, F/O. R.A.F., Esplanade Hotel, Oban, Argyll, N.B.

B. C. Morton Palmer, Lt. R.A.M.C., 5th Royal West Kent Regt., c/o G.P.O. London.

Marriage

DICKSON—BROWN—On September 28th, 1940, at St. Mary Redcliffe, Bristol, W. G. Carnegie Dickson, L.D.S., R.C.S., younger son of Dr. and Mrs. W. E. Carnegie Dickson, to Margaret, only daughter of Mr. and Mrs. E. L. Brown, of Bristol.

EDS. {N.A.N. B.S.L.

GUY'S HOSPITAL GAZETTE

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PASSIM

THE future of the training of medical students these days must of necessity be a precarious one. With most of the teaching hospitals organised on a sector basis to deal with casualties in large quantities, it is necessary to scatter their personnel widely; in addition, many of the staff have joined the Services. As a result, the old order of things has been entirely upset, medical and surgical firms no longer exist, adequate numbers of teaching cases are rarely available in one place, and registrars after sleepless nights spent with casualties, rarely feel fit for rounds on the following mornings. Taken all in all, therefore, the student attempting to qualify under present circumstances must anticipate extraordinary hardships, quite apart from the distraction of personal sacrifices.

Our Medical School has attempted to balance all these difficulties by organising the students into groups which move about the sector and systematically get "signed up" for the appointments in their curriculum. Apart from the disadvantage of being the most dangerous from the point of view of bombing, Guy's itself is still the most active teaching centre. With both Medical and Surgical Out-patients still flourishing, and all the special departments reasonably active, it is no wonder that the civilian beds, limited though they are in number, are filled with good clinical cases. Some of the honoraries are teaming up in the afternoon rounds, and many of the students are profiting from the combined medical and surgical experience that is being recounted during these intervals. Pembury, Farnborough and Orpington Hospitals in their relative quiet country surroundings can maintain a more even and regular teaching schedule, and more lately Preston Hall has been providing facilities for the instruction of students.

Now, as in the past, "you get out of everything as much as you put into it." Thus by firmly disciplining and applying himself to everything he does, the student will make good use of his time and fill in, by accurate personal observations, the large gaps which otherwise would exist in his knowledge. It is very easy at present to coast along in a lazy fashion, doing a minimum of work because the future is so uncertain anyway. This is absolutely the wrong policy to adopt, for no matter what "ism" triumphs in the present conflict, one thing is certain and that is competition will be as keen as ever; accordingly everyone must anticipate this ultimate battle of ambitions by arming himself with all the available education, experience and qualifications.

Before the war only a small fraction of Guy's men on qualification received appointments at their Hospital; this privileged few started as Clinicals and gradually, as their experience grew, they were allowed to assume more and more responsibilities. Nowadays everyone that qualifies is practically certain of being appointed to the sector; in many cases their training has been interrupted so that the individual concerned is "travelling light" as regards his knowledge of certain subjects such as skins, anæsthetics or E.N.T.'s. In spite of the absence of natural selection, and in spite of the apparent training deficiencies, some of the newly qualified men often find themselves shouldering great responsibilities very early in their careers. To maintain the original standard of medicine and to offset this menace, several house officers have been retained to supplement the experience of their colleagues for the benefit of all concerned.

▭

IN the last issue of the *Gazette* appeared a letter containing some critical remarks about the Guy's nursing staff. Every Guy's nurse is carefully chosen from a long list of candidates; on the basis

of centuries of experience and tradition their training has been gradually and conservatively modified so that now the words " Guy's-trained " have come to be a respected by-word throughout the medical world. If at certain times there appears to be an excessive number of nurses at the base hospitals, it is only because the Sector Matron feels responsible for the welfare of her nurses and is trying to get them out to places of safety and quiet. Our correspondent was indeed treading on dangerous ground when he referred to our nurses in such a manner, and elsewhere in this issue is a letter from a Guy's Sister discussing this fact.

A GREAT benefit that many Guy's people are missing during war-time is that old comradeship and fraternity which existed among all classes of hospital people. Scattered in little isolated groups over the map of Kent, it is very difficult for the newcomers to the Medical School to become acquainted with more than a few of the more senior men and to learn all the finer intricacies of the Guy's institution. Aware of this apparent loss, many of the students are anxious to start a sector news section of their own. This would be a most interesting and stimulating addition to the *Gazette*, and contributions of this kind will be looked forward to with great interest.

Sick Headaches

A Clinical Lecture delivered at Guy's Hospital in August, 1940, by A. H. Douthwaite, M.D., F.R.C.P.

GENTLEMEN,—The layman, in complaining of sick headache, is found as a rule to be suffering from one of three things—constipation, purgation, or migraine. The last is the commonest.

CONSTIPATION

The peculiarity about the headache of constipation is that it is more apt to arise in persons who are only rarely constipated than in those in whom the disturbance is of chronic nature. A generalised, dull headache, furred tongue, loss of appetite and nausea are the symptoms here, and are seldom met with in dyschezia. The latter may be associated with headache, but not with sick headache. An example of the class to which I refer is given by the individual who, having gone without a night's sleep, sleeps long and deeply on the following night. He awakes unrefreshed and declares that he has the feeling that his inside has ceased to function. The rectum is found to be empty; the colon, on the other hand, is readily palpable on account of the contained fæces. Clear thought is often impossible; the mind shies at the prospect of work. Within half an hour of evacuation produced by an enema the furred tongue, lassitude, depression, nausea and headache disappear.

" It isn't the day after a late night, but rather the following day that one feels so awful " is a *cliché* based on a background of the above signs. It seems that the sleep of extreme exhaustion must bring with it a profound retardation of digestive processes.

PURGATION

The sick headache due to purging is a far commoner visitant, in this country at any rate. The responsibility for it rests upon earlier generations of doctors and has now been eagerly assumed by unscrupulous vendors of purgatives. That most of the symptoms popularly attributed to constipation could be produced by purging was pointed out years ago by Hurst, but the knowledge is spreading very slowly. It seems that by hurrying the passage of intestinal contents the normal process of desiccation of fæces in the colon is prevented. This allows for profuse microbial growth, putrefaction and the absorption of various toxic substances into the portal circulation. Two years ago I selected six patients with sterile urine and gave them sufficient cascara sagrada nightly to produce liquid evacuation. Within three to five days five of these had *B. coli* in the urine. That purgatives must not be used with sulphonamides is common knowledge. This emphasises the point that purging increases microbial activity in the colon, H_2S is found in excess, and, being absorbed, leads to sulphæmoglobinæmia.

The type of headache is very similar to that of constipation, but is more persistent. Two day's constipation will abolish the furred tongue, sallow complexion, fetor osis, lassitude, nausea and headache. Abdominal exercises, suitable diet and lack of panic about bowel action are all that are needed to restore to normal function the majority of those who purge themselves daily.

MIGRAINE

Until recent years there was a tendency to diagnose migraine only on the strength of disturbance of vision followed by unilateral headache which was later accompanied by vomiting. This excluded a number of truly migrainous subjects whose symptoms were less clear-cut. Actually

headache is the only manifestation which can be expected in nearly every attack. Another common fallacy is the belief that the advent of vomiting relieves the headache. In my series of 140 patients this occurred in eight (12 per cent.) only.

Migraine may be defined as a paroxysmal headache often preceded by disturbances of vision and frequently coupled with nausea and vomiting. It usually starts unilaterally in the frontal or occipital region, but remains on one side of the head in approximately one-third of the cases only.

ÆTIOLOGY

Sex.—In this series, 102 were female, 38 male. The proportion suggested is, however, probably false, for a review of greater numbers indicates that female preponderance is only slight.

Heredity.—From just over half the patients a history of bilious headaches or blind headaches affecting the mother or maternal grandmother was obtainable. In three there was a history of migraine in the father. It appears, therefore, that inheritance is of considerable importance.

Age of Onset.—The relationship of migraine to the female reproductive period is striking. Thus half of my female patients were first attacked at puberty, a few started in childhood, 12 per cent. at the menopause, and the remainder between 20 and 30 years of age. Thus the beginning and end of the reproductive period accounts for 62 per cent. of onsets. Note that the belief that one can promise relief with the menopause is not upheld. Of 18 females who had developed migraine years before the menopause and who consulted me some years after that event, eight had experienced partial relief, five were much worse up to a post-menopausal period of eight years, and five had had complete relief and were seen in consultation for some different reason.

PROVOCATIVES

The various agents responsible for producing an attack of migraine may be grouped under four headings, namely: (1) Food; (2) Exhaustion; (3) Allergy; (4) Reflex. Ten per cent. of sufferers are sure to be attacked if they eat certain foods, especially those of fatty nature, rich cheeses, eggs and chocolate. They resemble in this respect the gall-bladder sufferer.

Mental exhaustion and worry are potent provocatives. Comparatively few patients are attacked when on holiday, provided that the vacation is being spent with congenial companions.

Allergy tends to be dragged into the ætiology of so many obscure diseases that I mention it with some diffidence. In only ten of my patients did it seem fair to incriminate it. The foods blamed were chocolate, cocoa, pork, beef and coffee. An attack could usually be produced by the consumption of the suspected substance, and positive skin tests were shown in six. On the other hand, not one of them was entirely free from migraine even if the food were rigidly avoided. The possible importance of allergy is heightened by enquiry into the earlier history and into that of associated diseases. Thus asthma had occurred in 14 per cent.; urticaria in 13 per cent. In both it was striking that they never arose during an attack of migraine.

As children, over a third of the patients suffered from train or car sickness.

The provocation of an attack reflexly by an external stimulus is not very common, but is dependable for the particular individual. Thus in one the glare of head-lamps will at once initiate a migrainous paroxysm; in another the flashing light from the sea on a sunny day will cause prostration. It will probably surprise you to know that as recently as fifteen years ago it was being taught that migraine was the result of uncorrected errors of refraction. This theory had held its sway for many years in spite of the fact that migraine usually starts during, or immediately after, a night's sleep, and in spite of its peculiarly paroxysmal, periodic character. I have met a few patients whose attacks have diminished in frequency as the result of wearing suitable lenses, but cure must be rare. In short, eye-strain can be regarded only as a provocative.

SYMPTOMS

Migraine may arise at any time of the day or night, but quite the commonest is the early morning. The patient may be awakened by the headache, and thus earlier visual disturbances will not have been noticed. This partly explains that only 58 per cent. admitted to having experienced visual phenomena.

Initial Disorders of Vision.—Of the 82 persons thus affected, 55 had major visual disturbances at the onset of an attack, *e.g.*, complete blindness, loss of a large portion of the field of vision, a blind central circular area, blindness in one eye, or blindness in half the visual field of one eye. The well-known zig-zag lights, fortification figures and whirling balls of coloured light at the periphery of the blind area occurred in them. The remainder said that there was some blurring of objects, a running together of the lines of a book, black spots or the appearance of rain. Very rarely transposition of objects from a " blacked-out " visual field to another area would take place. A middle-aged man walking at dusk in a grove suddenly, to his astonishment, saw floating above the tree tops two

tenuous figures in embrace. Being a militantly righteous person his first thought was that this was some celestial revelation. Further consideration of details convinced him that he was wrong. Flashes of light and dizziness soon made it clear that this was one of his migraines. In due course the vision faded, to be replaced by actuality in the right lower quadrant of the field.

Visual disturbances usually last for a few minutes, rarely two hours. They subside as the headache appears—a fact of some importance in considering the mechanism of a paroxysm.

I found what I believe to be a unique visual sequel to migraine. A lady of sixty years developed typical migraine at the age of fifty-nine. For two days after an attack she could read without difficulty without the aid of her usual spectacles (+3D).

Headache.—Severe headache occurring in each attack was present in 80 per cent. of patients. In the remaining 20 per cent. headache was not always a part of the seizure. Thus on occasions an attack might consist of blurring of vision, nausea and lassitude, which would pass off in a few minutes. In others, typical migrainous attacks might be interspersed with abdominal migraine.

In character the headache commonly starts behind one eye or deep in the frontal region; less often it is occipital. It spreads rapidly from this focus to involve the whole cranial area in two-thirds of cases, and is strictly unilateral in the remainder. In all patients it is usually most severe on one side than another, in which case it is invariably so on the side on which it began.

Sufferers describe the headache as blinding, devastating, prostrating, or of boring nature. It never gives a sensation of pressure from without, but often of bursting from within. In nearly every case the headache develops a throbbing character soon after its commencement.

Of the 47 persons who had unilateral headache, 22 experienced it always on the same side; in 25 it was on one or other side with a bias towards one, usually the left. If the headache always occurs on the one side of the head, the possibility of its being due to a leaking cerebral aneurysm should be considered.

The headache is aggravated by noise, light, mental effort, and by the strain of vomiting. It usually renders the victim incapable of work, and he seeks repose in a darkened room.

When vomiting occurs it makes the headache worse in 88 per cent. and brings relief in the remainder.

The duration of the headache is usually a matter of hours, sometimes days. The common story is that an attack starting in the morning increases in severity until evening, when sleep comes to ease the exhausted victim. On the next day all traces of the attack have passed, and the patient may even feel better than he has done for the last few weeks.

Nausea and Vomiting.—Roughly one-third of migrainous patients does not suffer from nausea or vomiting. Vomiting occurs in 48 per cent., nausea only in 12 per cent., and prolonged retching not preceded by vomiting in 8 per cent. Those who vomit are to be pitied, for every outburst intensifies the headache, and when the stomach contents have been ejected bile is brought up. When the supply of this fails, unproductive retching adds to the agony.

UNUSUAL TYPES

1. A fluctuating but persistent headache lasting for several days (*status hemicranicus*) is always associated with rapid loss of weight, and sometimes with numbness of hemiplegic distribution.

2. Phenomena suggesting focal lesions in the brain, *e.g.*, aphasia, unequal pupils, hemianopia ophthalmoplegia, or even hemiplegia. These, rare accompaniments of a migrainous attack only arise after many years of the disease. The signs disappear with the subsidence of the attack, but with each subsequent seizure they are likely to recur. In the long run they may become permanent. This can only be explained on the grounds that an organic change has been superimposed on a disorder of function. Autopsy has revealed cerebral thromboses as the cause of this perpetuation of symptoms.

3. Migraine-epilepsy is a rare form. It it most likely to arise in persons with a family history of epilepsy. It is characterised by the advent of loss of consciousness when the migrainous headache has reached its height. Convulsions may occur. With recovery of consciousness it is found that the headache has vanished.

4. Migrainous neuralgia.—The attack of migraine may be accompanied and/or followed by severe pain on one side of the face, neck, head or throat. Occasionally this pain arises without the headache.

5. Abdominal migraine.—The greatest care must be taken before committing oneself to this diagnosis, which I have seen oftenest misapplied to examples of appendicular colic. The outstanding features are prolonged vomiting, severe abdominal pain of colicky type, no rigidity and no point of tenderness. On the other hand, tenderness along the liver margin is almost constant. It is necessary also to have a history of attacks of true migraine. Sometimes urticaria follows an attack.

Liver tenderness and slight transient enlarge-

ment is often noticeable after a typical migrainous attack, especially in those who incriminate foods as provocatives. The tenderness is not limited to the gall bladder area, and a cholecystogram has a normal appearance. Unfortunately it is not needless to point out that cholecystectomy never helps the patient. A poor gall-bladder shadow after oral administration of the dye usually indicates faulty absorption and not cholecystitis. Intravenous administration should in such cases be undertaken.

WARNINGS OF ATTACK

In roughly half of these patients a warning the day before an attack of migraine could be recognised. These were drowsiness, furred tongue, nasty taste in mouth, pale stools, diarrhœa, constipation, anorexia, unusual hunger, or exceptionally deep sleep. For any one patient the type of warning was constant.

Onset and Closure.—Headache started in the early morning in 68 per cent. The end of the attack usually coincided with deep sleep, sometimes with polyuria, rarely with great hunger.

Spontaneous Relief.—Relief from migraine can be confidently expected only as the result of pregnancy or the advent of old age. The menopause will probably ease matters.

SPECIAL INVESTIGATIONS

There is no constant biochemical abnormality to be found during or after an attack of migraine. It is true that the blood sugar in an attack is low, but this can be explained in the usual hour of onset, and the rejection of all food. Lævulose tolerance tests are normal. In an attack the blood uric acid has risen in the six out of nine cases examined for this. The inter-paroxysmal figures have been in the neighbourhood of 3 mgs. per 100 c.c., rising to 5 to 6 mgs. in the attack. The significance is not clear. The Van den Bergh test is usually negative except in the instances where slight icterus follows an attack. The urine after paroxysms often gives a positive ether-reaction, indicating the presence of the " proteose " of Oriel. Whether this observation is of any practical value has yet to be proved. It is of interest in that it also arises in asthma and urticaria.

The C.S.F. pressure in an attack is usually low. A migrainous girl whom I had in the wards always had an attack after drinking cocoa. Her normal C.S.F. pressure was 150 mm. of fluid. She was given cocoa and had an attack that night. Dr. D. Leeming, who was my house-physician at the time, nobly volunteered to be called in the night to re-investigate during an attack. At 4 a.m. the C.S.F. pressure was 65 mm. The blood uric acid had risen from 3.5 to 5 mgs. per 100 c.c. The blood sugar was 0.08 per cent. as compared with an inter-paroxysmal figure of 0.105 per cent. at 8 a.m.

THE PROXIMATE CAUSE OF MIGRAINE

Many ingenious but quite untenable hypotheses have been advanced to explain the migrainous headache. We are still wandering in the field of conjecture. There is, however, a lot to be said for the theory of vascular disturbances being responsible. Thus during the paroxysm the affected side, if unilateral, may be paler or redder than the other; the temporal artery may be contracted or dilated. The headache is throbbing in nature. It can be temporarily arrested in unilateral cases by compression of the common carotid only to return in greater severity when the pressure is released. Locally, the two drugs which are the most reliable for the relief of headache, namely ergotamine and ephedrine, act principally upon the arteries and arterioles. The transient paresis occasionally seen remind one of similar results in hypertensive cerebral attacks.

It is suggested then that the visual changes and the headache are due to alterations occurring in the calibre of the intracranial vessels, the first being possibly that of contraction, the second being that of dilatation.

TREATMENT

(*a*) In attack, ergotamine tartrate injected intravenously or intramuscularly produces striking relief in 80 per cent. of cases. The intramuscular route is usually adequate, and the dose is 0.5 mg. The drug may produce vomiting, but this is short-lived, and can be prevented by the simultaneous administration of atropine. It often causes cramps in the legs for a day or two afterwards. An interesting side-effect is the shrinkage of varicose veins for some hours after its administration. If the drug given in this way is a success, then the effect of oral administration of 1 mg. may be tried. If the tablet be allowed to dissolve under the tongue before swallowing, enough is absorbed through the buccal mucosa to ensure earlier action.

When ergotamine fails, ephedrine hydrochloride (1 to 1½ grs.) may be tried.

Mild attacks may yield to such simple analgesics as phenacetin or aspirin. In all severe paroxysms the patient is best kept in a dark room, recumbent, and guarded from solicitous friends. If the above drugs fail the attack must be allowed to take its course, and any fussing of the victim only makes matters worse.

(*b*) Between attacks.—Our duty here is to search out the provocatives and to help the patient

to avoid them. These I have already enumerated. The "liverish" group, whose members are upset by fats and who often have pale stools, undoubtedly benefit from a diet free from cooked animal fats, cream, eggs, egg dishes, cocoa, chocolate, spiced food and coffee. Furthermore, the administration of the cholagogue dehydrocholic acid 7½ grs. twice daily on alternate days and glucose one ounce at night is worthy of trial. The value of a sharp walk between dinner and bedtime, though scarcely to be recommended at the moment, should be remembered for the days of peace.

Notes on Peripheral Nerve Injuries

By H. R. Harley, Esq.

FIBRIN suture is the latest method of nerve-suture, the nerve ends being stuck together with concentrated fibrinogen. A full account of the method is given by Young and Medawar in a recent edition of the *Lancet*, so that no comments are needed here. Suffice it to say that the latent interval required by the axons to cross the suture line is less after fibrin suture than after stitch suture, and it is hoped that this method will prove an advance, especially in nerve-grafting.

Numerous factors are concerned in the success or failure of nerve suture. Recovery is more rapid and complete in children and young adults than in older persons. The importance of the time of operation has already been discussed. The pre-operative and post-operative treatment, and the technique of suture are all of great importance, while the type of injury and the presence or absence of sepsis play their part. Loss of nerve substance will result in imperfect funicular apposition and poor recovery, while nerve compression should be followed by good results because intraneural topography is undisturbed. Infection will lead to endoneural fibrosis at the suture line and in the proximal segment, to ascending toxic neuritis, and to extraneural fibrosis, all of which form adverse influences. The nerve involved is also important. Pure motor or sensory nerves recover well, while the outlook in injuries to mixed nerves is decidedly less favourable. This is due to the fact that axonal straying may lead to motor cells establishing communications with sensory end-organs. Thus good recovery is seen in the radial, facial and trigeminal nerves, while that in the median, ulnar and sciatic nerves is poor. Injuries high up in the nerve recover better than do those low down, as demonstrated by injuries to the median and ulnar nerves in the regions of the elbow and wrist. This may be related to the distance of the injury from the trophic centre.

END RESULTS OF NERVE SUTURE

It is important to distinguish between two standards of recovery—the neurological and the economic. The former is indicated by the recovery in conduction as shown by neurological tests, while the latter represents the functional capacity of the part, for instance, the ability to work.

These two standards do not always run parallel. For instance, an ulnar nerve injury, provided there is no contracture, is not much handicap to a manual worker, but is a calamity to a professional violinist. In these two individuals, while the neurological recovery may be identical the capacity for performing their respective jobs is widely different.

A study of the figures compiled by Kennedy, Fragier, Stopford, Forrester Brown, Platt, Gosset and Foerster indicate that the results of suture depend upon the nerve involved, and allow the following generalisations to be made. In the case of the radial nerve, recovery is excellent, but synergistic action of the wrist extensors is rarely regained. Recovery in the median nerve is fair and in the ulnar nerve moderate, while that in the brachial plexus is poor. The above remarks apply to the neurological standard. In median palsies anæsthesia of the index finger overshadows the motor loss in importance, and renders the economic result bad irrespective of profession. Causalgia is an important aftermath of median nerve injuries. In ulnar nerve lesions the economic result is bad in fine workers such as musicians and artists, but good in manual workers. Recovery after injuries of the lateral popliteal nerve is excellent when the lesion is incomplete, but only moderate when it is complete. The economic result, however, is excellent if efficient apparatus is provided. When the sciatic nerve is injured, good recovery takes place in the lateral popliteal component, while that in the medial popliteal portion is bad. The intrinsic muscles of the foot never recover. The calf muscles develop more power than do the extensors, this results in equinus deformity. The economic standard of recovery after injuries of the sciatic nerve is extremely bad. Trophic ulceration of the heel is common and may necessitate amputation, while causalgia is a not infrequent sequel.

It should be remembered that much of the eventual disability is often due to injury to other

tissues such as muscle or bone. The pathological effects of through-and-through wounds due to bullets are very different to those produced by shell or bomb fragments. The former frequently give rise to very localised injuries with little loss of tissue, and slight sepsis, while the latter often result in gross loss of tissue, sepsis, and subsequent scarring. Ascending toxic neuritis is not uncommon in these cases.

The end results of neurolysis are good provided strict criteria for operation are adopted, otherwise they are poor.

OPERATIONS TO BRIDGE A GAP

Numerous devices are employed to bridge a gap. This object may be achieved by transposition of the nerve, by suturing, and immobilising the limb with the joints in such a position that the nerve traverses the shortest possible distance. The position of the joints is then gradually altered so that the nerve is stretched. By a two-stage procedure in which the nerve ends are approximated as closely as possible with sutures the above postural routine is then carried out, following which the nerve is resutured with its ends in contact, and the postural treatment again performed. The bones may be shortened, or finally certain operations may be performed on the nerve. Of these procedures the two-stage operation is to be condemned, the traction results in so much endoneural fibrosis that conduction is impaired, while the postural routine produces contractures and joint stiffness which take months to overcome. Bone-shortening is not desirable in the lower limb, while in the forearm it results in marked muscular dysfunction. It is a useful procedure in the upper arm. Transposition is a valuable device, expecially in the case of the ulnar and radial nerves.

The following operations have been practised on the injured nerve :—

1. Neuroplasty.—This consists of turning down a flap from the proximal stump and suturing it to the distal one.
2. Tubulisation.—The gap is bridged by a tube of fascia, vein or foreign material.
3. Nerve crossing, or nerve anastamosis, in which the proximal stump of the injured nerve is sutured to the distal stump of a neighbouring nerve which is partly divided.
4. Nerve grafting.

The first three of these should be relegated to the pages of history, the fourth will now be discussed.

NERVE GRAFTING

Following the results of cable grafting in the last war the method was discredited until 1930, when Duel and Ballance obtained excellent results by grafting the facial nerve in the bony part of its course with autografts taken from the lateral femoral cutaneous nerve. This showed that successful nerve grafting was a definite possibility. The good results obtained by the above workers were due to the fact that perfect apposition could be obtained without the use of sutures. Also the nerve is small and purely motor, and the length of graft necessary is relatively short. The bane of nerve grafting is endoneural fibrosis at the suture line. This is aggravated by imperfect apposition, sutures and sepsis. The first two of these were eliminated in the case of the facial nerve.

The graft acts as a scaffolding which allows of the growth of axons through it. The Schwann cells of the graft provide neurilemma tubes into which the axons grow, so that the scaffolding is specific. The whole of the graft is eventually absorbed and new neurilemma sheaths are produced by Schwann cells, which are always found in close relationship to the tips of the growing axons.

Balance thought that if the graft were allowed to degenerate *in situ* for fourteen days the myelin would disappear and leave the neurilemma tubes empty, so facilitating downgrowth of the axons. He therefore used such grafts and claimed that regeneration was quicker by half than in the case of fresh autografts. This has not been confirmed by Bentley and Hill, or by Young, Holmes and Sanders, who found little difference in the rate of regeneration using fresh and predegenerated autografts.

According to Bentley and Hill three things are essential to satisfactory grafting, namely :—

1. An adequate scaffolding.
2. Absence of fibrosis at the suture line.
3. The graft must have approximately the same diameter as the injured nerve.

The third of these forms the main difficulty in man, because there are no nerves comparable in size to the limb nerves except other important limb nerves, so that autogenous single-thickness grafts cannot be used. Bentley states that single-thickness grafts are far more satisfactory than cable grafts, though Young, Holmes and Sanders say that the latter are probably the more efficient, and that they are best prepared with the aid of concentrated plasma.

To overcome the difficulty of obtaining suitable single-thickness autografts Bentley and Hill used homeografts, that is to say grafts obtained from another animal of the same species. They claim to have obtained good results, and to have bridged gaps of three inches in the experimental animal.

These workers state that homeografts always excite a marked reaction in the tissues of the host which leads to their absorption, but that they act as a scaffolding before the latter occurs. This reaction occurs however closely the two animals are related, it will occur in the case of a mother or father and child, or in twins, and is uninfluenced by blood-grouping. Because of this reaction, homeografts are not quite as satisfactory as autografts, but although regeneration is somewhat slower in the former, the final degree of recovery is about the same in either. Bentley and Hill suggest that fresh homeografts obtained from amputation specimens or fresh cadavers should be given a trial in man.

Experiments by Young, Holmes and Sanders suggest that homeografts obtained from rabbits' nerves, and stored in Ringer's solution at 2° C., are successful if the cells of the graft are still alive, but not if they are dead. Thus after storage for seven days grafts were successful, but after 21, 24 and 32 days they were not. This is accounted for by the fact that the Schwann cells of the graft must provide neurilemma tubes before the axons can grow into it. For this reason alcohol-fixed homeografts and heterografts are probably useless. The work of French investigators on alcohol-fixed cat and rabbit spinal cord is invalidated by the fact that very short grafts only (not more than 1 cm.) were used.

It is hoped that the future of nerve grafting will be much rosier than the past. Fibrin suture may help to improve the results. It has been suggested that the distal suture line should be excised at the time when it is calculated that the axons are about to reach it. The new suture line will then form far less of a fibrous tissue barrier to hinder the growth of the axons.

Sector News

Guy's Letter

THE starlings, the wet weather and the bombs are still with us, relieved only by the occasional gramophone recitals; the daily teaching rounds and out-patients sessions are also very popular and attracting large numbers of students.

All at Guy's will wish to congratulate Mr. and Mrs. F. R. Kilpatrick on the recent birth of their son.

It is not so much the litter as the chute bordering the new staircase, which gives to the bombed part of Hunt's House a rather Hampstead Heath appearance. If this is to be a new and speedier method of descent, then the Combined Round will have yet another attraction, and the seats, like the wits of the pundits, will shine indeed. The Ward Clerk whose attendance there was for fashion's sake, who laughed or looked intent with the mighty, who nodded knowingly when they caught his eye, who was really bored stiff because he didn't understand their terms—he will have his reward at four o'clock.

The evening gramophone recitals which have, on most nights, been given in the dispensary have now ceased owing to Mr. Oswald Fung's removal to Orpington. A new feature has been started lately, once a week a discussion on some topic is opened by a member of the hospital. The first was by Professor J. A. Ryle on "How shall democracy win?" The two small rooms were crowded, but there is reason to believe that those who cannot get in will not be prevented from hearing Mr. T. B. Layton's address on "Our Enemies" on the night of this note's going to Press.

R. T. H.

Farnborough Letter

OUR war wounds are still sadly gaping. After the initial show of energy which accompanied the start of the healing process, the speed of reconstruction has slowed considerably, and, while some of the damaged wards "never would be missed," others are a real loss, in particular the female reception ward, whose duties have been taken over by its male counterpart. While the mixing of the sexes need be no cause for concern, the accommodation has at times been sufficiently overtaxed to cause the transfer of patients in a condition little altered from that in which they were received, and this on occasions has produced a situation between the Sisters concerned which has needed the most tactful handling.

After many weeks completely void of organised entertainment, we have much pleasure in reporting two events which we hope are only the first of a series. The first was a dance held at "The Fantail." Bill Trethowan produced a scratch band of local talent whose stimulating playing was a pleasant change after the radiogram of former occasions. The enormous attendance ensured the success of the evening and should be an encouragement to Merrick, to whom our thanks are due for arranging this one, to organise another in the not too distant future.

The second event has been the first game of the hockey season, which, though somewhat damped by the weather, should be a prelude to great things to come.

We have recently lost two residents. Ben Heap had become so much part of the hospital

during his long time here that it seems to be missing something now he has gone; while the grass is beginning to grow on the road to Orpington. We shall miss John Crawford too, whose dry humour we cannot easily replace. We welcome Jackson as our new Resident, and to him and the many new students and nurses who have recently arrived here we wish happy days at Farnborough.

C. L. L. R.

Pembury Letter

ABOUT a year ago we drew attention to the beauty of autumn in Kent, and once again we have been treated to a glorious display of colour. Now the trees are rapidly shedding their leaves and we are left with the sombre aspect of winter, but enlivened this year by the sounds and vibrations of things going up, and things coming down. This winter, like so many others in the sector, we have our "huts" in use, and we hope they will stand up to the rigours of the weather. They certainly look cosy enough, and we trust that appearances are not deceptive.

With the disappearance of outdoor recreations, the social activities of the nurses and students are perking up, and we are glad to hear that a recreation hut for nurses is a possibility in the near future. In the meantime we are grateful to Miss Wheeler for allowing us the use of the Nurses' Home for dancing.

Finally, we are requested by the Residents to send a special message to their beloved "Paymaster." They feel that a little more regularity in the despatch of their remuneration would not be out of place, in fact the need is urgent. It would appear that the Government's special arrangements for the banks to extend credit facilities to farmers does not as yet apply to house officers in the E.M.S.

N. M. J.

Correspondence

Ladies in the College

To the Editor of the GAZETTE

SIR,—I thank Mr. Wass for his reply on the subject of ladies in the College dining-room. That the female members of the Guy's Fellowship class should be granted the same privileges as the male members seems entirely reasonable, and I should therefore like to withdraw my criticism of this matter.

I agree with Mr. Wass that it is a rare event for ladies to appear in the College dining-room, and that the tact of most members is above reproach. Nevertheless the event does occur, and that the matter should be entirely in the hands of the tactless few seems rather unsatisfactory.

However, my first letter was written some time before the "Blitz," but now, under the present conditions, the matter is probably of insufficient consequence for further consideration.

Yours, etc.,
T. H. SPENCER-SMITH.

Royal Medical Benevolent Fund

To the Editor of the GAZETTE

SIR,—The war has brought many changes into our lives, but as winter approaches may I remind your readers who have so generously responded to my Christmas Appeal for many years not to forget or overlook the gifts which the Royal Medical Benevolent Fund endeavours to distribute to all its beneficiaries.

These old people have had their share of hardships. For the most part they live alone in lodgings or in bed-sitting rooms. Some have had to move out of their rooms by the coast, those in London and other towns have had anxious days and nights.

I ask you readers to remember these medical colleagues, their widows and families, and to help us to send to each a gift of thirty shillings this Christmas as a token of our sympathy. The extra money brings comfort and warmth into many lonely sad lives and the feeling of "not being forgotten."

Donations should be sent to our new address, as under, and cheques made payable to the "R.M.B.F. Christmas Gifts Fund."

Please help, and forward donations now to enable the gifts to be distributed before Christmas Day.

Yours, etc.,
THOS. BARLOW,
President,
Royal Medical Benevolent Fund.

1, Balliol House,
Manor Fields,
Putney, S.W.15.

Nurses' Training at Guy's

To the Editor of the GAZETTE

SIR,—In your last issue Dr. Grasby, in his letter, suggests that there is little difference between the nurses' training at Guy's and that at the hospitals under the Kent County Council. (Dr. Grasby admits that he is treading on dangerous ground.) There is always an enviable list of candidates waiting to train at Guy's, and what is even more satisfactory, a

very large proportion of our probationers go on to complete their training. This is the case in spite of the fact that the Guy's training is considerably more expensive to the nurse than that given by the Kent County Council.

Regarding the number of nurses in one ward, the Guy's wards have the ratio of patients per nurse recommended by nursing authorities to give adequate nursing care to the patients and adequate teaching to the probationers.

May I take this opportunity to congratulate the *Gazette* on its splendid fortnightly effort since war began.

Yours, etc.,

FLORENCE TAYLOR.

Farnborough.

Hospital Information, etc.

Notice

Mr. T. B. Layton, having given up his consulting room at 19, Queen Anne Street, will conduct his private practice from NUFFIELD HOUSE, Guy's Hospital, S.E.1 (Telephone HOP 1867), which will in future be his professional address, where appointments may be made by telephone or letter.

Pass List

ROYAL COLLEGE OF SURGEONS OF ENGLAND
L.D.S.
FINAL EXAMINATION

October, 1940

PART I

Surgery

J. A. Boyd
J. S. Breen-Turner
D. R. Corless
A. A. Dyas
D. R. Hone
M. A. Kettle
T. F. Mordaunt
N. A. Power
J. F. S. Rumble
S. P. Vorster
F. M. Wood
D. Wright

PART II

Dental Surgery

F. E. Barlow
A. E. Baxter
O. R. Berry
H. H. Brown
B. D. Clark
H. L. P. Cullingford
D. K. L. Davies
D. W. A. Drew
A. C. J. Freer
D. L. Gabb
F. H. Glass
R. C. Green
J. A. Orchover
G. W. Sawyer
S. N. Simpson
B. P. Taylor

SECOND PROFESSIONAL EXAMINATION

September, 1940

Dental Mechanics

D. T. Anderson
B. M. Barker
G. A. Brown
B. H. Dicker
J. W. Drury
J. R. Fuller
W. J. M. Hale
G. E. Johns
P. H. S. Lahaise
J. P. Pearce
J. A. W. Purnell
K. A. Simons
A. J. Whelpton

Dental Metallurgy

A. C. Campbell
R. C. Curties
B. G. E. Donner
J. C. Howe
N. A. Lee
C. S. Matthews
J. P. P. Pearce
B. H. Taylor

Anatomy and Physiology

R. H. Beare
A. W. Bevis
D. C. Boyd
N. P. Bronsdon
J. Bunch
J. R. Dimock
D. Middleton
R. Middleton
H. Mistlin
E. H. Orchard
J. E. Pountain
A. C. Powell
J. Elder
W. R. Hall
P. D. Harvey
L. J. Leggett
M. Levene
F. B. Sartory
K. A. Simons
P. J. Wardill
A. J. Whelpton
R. Woollcott

Special Anatomy and Physiology

K. A. Barnett
S. E. Blockley
R. F. Camp
P. C. Gartrell
K. E. Gateley
E. D. Whiteley

UNIVERSITY OF LONDON
SECOND EXAMINATION FOR MEDICAL DEGREES

September, 1940

R. A. Bush
J. M. Fabricius
M. M. Figgis
R. K. Haslam
S. A. Marsh

Papers by Guy's Men

Clegg, J. W., and Another. Preparation and use of human serum for blood-transfusion in shock. *Lancet*, 1940, *ii*, 294.

Coxon, R. V., and Crawford, J. P. Sulphæmoglobinæmia after prolonged administration of phenacetin. *Brit. Med. J.*, 1940, *ii*, 556.

Johnston, T. B. An early human embryo with 0.55 mm. long embryonic shield. *J. Anat.*, 1940, **75**, 1.

McGregor, H. G. Exophthalmic ophthalmoplegia. *Lancet*, 1940, *ii*, 579.

The Services

Prisoner of War

Lieutenant Samuel Thomas Williamson, R.A.M.C.

Changes of Address

Patrick W. Clarkson, Major R.A.M.C., 4 C.C.S., c/o Army Post Office.

Marriage

PETT—HILDESLEY.—On Saturday, 5th October, 1940, at St. Nicholas' Church, Sutton, Surrey, Surgeon-Lieut. (D.) Roger Dixon Pett, R.N.V.R., eldest son of Mr. and Mrs. H. Milburn Pett, to Marion Pamela, younger daughter of Mr. and Mrs. P. T. Hildesley, of Heath Drive, Sutton.

Deaths

BURGESS—On 18th October, 1940, Norman Francis Clifford Burgess, M.A., M.D., M.R.C.P., of Bristol and Cheltenham, aged 38.

CROSS—On 29th October, 1940, Francis George Cross, F.R.C.S., of Worthing, aged 69.

EDS. {N.A.N. B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

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PASSIM

THE conditions of service in the Air Raid Precautions services are deservedly occupying the attention of Parliament, and also, to a lesser degree, that of the Daily Press. The points which are receiving most stress are those of sick pay and of pensions to the dependants. At the same time, an attempt is being made to reorganise the Emergency Medical Service, which is but one of the A.R.P. services. Several letters have recently appeared in the medical journals, which draw attention to many curious anomalies. Thus, firstly, it would seem anomalous to talk of sick pay at all: the members of all these services are exposed, to a varying degree, to the vicissitudes of enemy action; their work must and does go on, irrespective of the intensity of the raids. Any such person who should be injured on duty should by rights receive full pay until he is fit for duty again, or for a definite stated period; at the end of this period, a representative committee would assess the likelihood of further serviceability of each case and determine whether sick pay or a disability pension should be payable. In every case of permanent disability or of death, a pension should be payable at a rate corresponding to that applying to the corresponding rank in one of His Majesty's armed forces: thus a junior medical officer would correspond with a lieutenant, and so on for the higher grades, according to seniority. The Ministry of Health, through the E.M.S., employs a large number of doctors of various grades, completely without the protection endowed by membership to a county or borough council medical service and the provisions made for sick leave, disability and the protection of dependants in the case of death on duty should be clearly defined. Secondly, the terms in which the duration of guaranteed service are defined are admittedly vague and ambiguous; they seem to leave room both for instant dismissal and also for compulsory service until the end of hostilities. This would certainly seem to be very one-sided; so far as the medical officer grades are concerned, compulsory service until the end of hostilities is on a par with conditions applying in the Services, but if summary dismissal is indeed a possibility, then there should be a committee to whom appeal may be made, and by whom also requests to leave the service would be considered. Recruitment to the E.M.S. is also a matter of considerable importance; at the close of six months of house appointments, every doctor, within certain age limits, is liable for call up for commissioned service in His Majesty's Forces. It would seem to be essential, under the present circumstances, that an equitable allocation, both as regards numbers and talent, should be made of young doctors to the service where they are needed most. The E.M.S. should therefore hold equal representation with the Navy, Army and Air Force upon the Central War Committee of the British Medical Association, in order that an adequate personnel may be obtained. The staff available for the treatment of air raid casualties includes also, of course, the medical officers of the municipal and county hospitals in the sector. The necessity for the employment of physicians and surgeons of consultant rank is also beyond dispute; with their assistance, the methods and standards of treatment can be frequently modified and the results improved. In particular, specialist clinics have now been firmly established for the treatment of chest injuries, facio-maxillary injuries and so on. The object of the present organisation is to permit

the full and complete interchangeability of service by all the Hospitals, both voluntary and municipal, in each sector for the treatment and evacuation of air raid casualties, whilst retaining as far as is practicable, their own individuality both as regards staff and treatment of civilian sick. This is a worthy ideal, so long as it is not allowed to become an obstructive one, but it has led inevitably to a duality of administration with consequent delays. When the full effects of winter upon the occupants of air raid shelters become apparent, there may well be a large volume of civilian sickness, indirectly the result of enemy action. The treatment of such cases should be a national charge, not a local one, and could thus be absorbed into the organisation of the Emergency Medical Service. This would be of great advantage in many respects if only in so far as it would facilitate the rapid evacuation of civilian sick, thus easing the burden upon the hospitals in the central areas whilst ensuring the maintenance of a high standard of treatment.

THE news that Colonel Donald Clewer, Director of the Army Dental Service, has been promoted to the rank of Major-General will be received with the utmost gratification by every serving dental surgeon and by the profession as a whole.

Those who know Major-General Clewer personally and who have followed his career will be aware that no one in the profession could be more deserving of this high honour. He qualified at Guy's L.D.S., R.C.S., in 1914, and was mentioned in Despatches in 1918.

Obituary

NORMAN FRANCIS CLIFFORD BURGESS, M.D., M.R.C.P.

DR. NORMAN FRANCIS CLIFFORD BURGESS, M.D., M.R.C.P., who passed away on October 18th after a long illness, will be remembered by many old Guy's men. After a brilliant career as a student, he worked for some time in the Skin Department before furthering his studies in France and the United States. Subsequently, he became Honorary Physician to the Skin Department at Bristol General Hospital, Clinical Lecturer on Diseases of Skin in the University of Bristol, and was also on the honarary staff of several other hospitals. Dr. Burgess was a man of wide interests. He was responsible for the revival of the medical unit of the Cambridge University O.T.C. after the late war, and also served in the R.A.M.C. (T.A.) for several years. He was a Freeman of the City of London, a member of the Apothecaries' Guild, of the St. Stephen's Prizes Guild, and also a Freemason.

FRANCIS GEORGE CROSS, F.R.C.S.

FRANCIS GEORGE CROSS, always known at Guy's just as "Frank," was one of the most popular men of his generation. He entered Guy's in 1895 and was closely associated with that little coterie—Cazenove, Miller and Fortescue Brickdale—who made Guy's such an entertaining society at that time, and who founded and ran the Guyoscope. Of fine physique, good-looking, and of a most attractive personality, he hadn't an enemy in the world. He qualified in 1901 and took his Final Fellowship in 1902. He was House Surgeon to Mr. R. Clement Lucas, and was also Assistant Demonstrator of Pathology. Though of fine physique he suffered from bronchitis and found that he could not meet the strain of practice in England, and went to practise at St. Jean de Luz. Later on he settled down in practice in Las Palmas in the Canary Islands. The present writer went to Las Palmas many years ago with a general introduction from him and found that his name was an "open sesame" to every circle on the island. He was as popular there as at Guy's, built up a large practice, and was a successful surgeon to the British Hospital in Las Palmas. It was a striking tribute to his charm that even in a small and exiled British community such as Las Palmas, where most people get sick of the sight of each other in the limited social round of tennis, bathing, club and cocktails, he was welcome everywhere and on every occasion. He served in the last war with distinction in the R.A.M.C. both in Egypt and India, and was as popular in the Army as in civil life. On retiring from practice he went to live at Worthing. He died at Sidmouth on October 29th of this year at the age of 69.

H. L. E.

Injuries of the Face (Soft Tissues)

A Clinical Lecture delivered at Guy's Hospital by Nils L. Eckhoff, Esq., M.S., F.R.C.S.

GENTLEMEN,—In my last lecture I attempted to give you an outline of the treatment of injuries to the bony skeleton of the face, and pointed out that these injuries occur both in civil life and on active service, in increasing number in proportion to accidents of road and air transport. Severe injuries of the soft tissues of the face also occur in civil life, but are much more common in warfare, and my remarks to-day are largely the result of my experiences in the last few months. The two main classes of such injuries are wounds and burns.

WOUNDS

The large majority of wounds seen have been due to shrapnel, producing in some instances enormous wounds of entry, and usually no wound of exit. Bullet wounds have also been seen producing a small wound of entry and a larger wound of exit. It is useful to consider the treatment in three phases—primary, secondary and tertiary.

The primary treatment of such a wound may fall to the lot of any one of you. It is first essential to gauge accurately the degree of shock, which is sometimes surprisingly slight. If the blood pressure has fallen to 90 or the pulse risen to 120 the condition of the patient is serious, and it may require two pints or more of blood, serum or plasma to restore the blood pressure to a reasonable level. The treatment of shock is well described in the M.R.C. War Memorandum No. 1, which small booklet is well worth the attention of all of you. It consists mainly in the control of hæmorrhage, protection from cold, administration of fluids, transfusion and infusion and morphia. Only when the condition of the patient is good is it time to consider the treatment of the wound. If the lower jaw is fractured in two places great care must be taken during the resuscitation period to see that the tongue does not fall back, and such a patient must on no account lie on his face unattended. If he cannot sit up, he must lie on his face. I was recently called to see a fracture of the jaw at a distant hospital, and on my arrival the patient was virtually choking, and five or six doctors felt sure the patient would die. By pulling the tongue forwards and administering two pints of plasma, the patient was fit enough to be transferred to the maxillo-facial unit for treatment a few days later.

Before taking any steps to deal with the wound there are three features of paramount importance that require recognition. The first is that practically all severe wounds of the face are complicated by an opening into a mucous-lined cavity—the mouth, nose, antrum or other air sinus. Infection is therefore almost certain to occur, and provision must be made for drainage. The absence of this provision has been the most noticeable feature of cases sent on from other hospitals, and our first act has frequently been to remove all sutures and provide drainage.

I am interested to note that Mr. Brock has laid great stress on the danger of sewing up severe wounds of the chest in his recent lecture published in the *Gazette*, and that Mr. Ogilvie has similarly pointed out in the *Lancet*, in discussing wounds in general, that the occasions for primary suture of a wound are rare, and must always be considered a surgical experiment, and certainly not undertaken if the patient cannot be kept under close personal observation. He goes so far as to suggest that it might not be a bad thing to reopen all wounds thus sewn up before sending them on a journey to other centres. A few days ago I happened to be the first doctor on the scene when one of our R.A.F. pilots landed by parachute with a machine-gun wound entering below the right scapula and emerging below the right costal margin. I accompanied the patient to the nearest first aid post and was horrified to hear the young doctor immediately call to his orderlies for silkworm gut sutures, even before he had noticed that the patient had two wounds.

The second point is that gas gangrene is is practically unknown in facial injuries. This may have relation to the self-same fact mentioned earlier that most facial injuries open into one or other of the facial cavities, and the conditions are therefore not ideal for the growth of anærobic organisms. The third point is that facial tissues are very precious, and have a remarkable power of recovery. For these two reasons it is generally agreed that excision of wounds, recommended for wounds of the body generally seen in the first few hours, is definitely not indicated on the face. This point is mentioned in the latest Memorandum from the M.R.C.

In civil surgery we are taught that the correct treatment of a lacerated wound is to convert it into an incised wound by excision of a strip of skin from the edges, to remove all bruised and damaged tissue, and to carry out primary suture if possible. I have already pointed out that these principles have to be revised considerably when

dealing with war wounds. In the case of civilian facial wounds it is possibly going too far to say that these principles are completely wrong, but it is correct to say that the occasions for their application are almost non-existent in war wounds. When we read on the notes "Wound excised, all fragments of bone removed, and wound sutured under considerable tension," we need hardly look at the patient to say that all stitches must be removed immediately. Nothing is gained by attempting to get a cosmetic result at this stage, for in any case the wound will probably have to be excised later to get the final result desired.

A little trimming of torn edges may be permissible, removal of pieces of bone *completely* loose, a few sutures loosely tied in places where there is no grest loss, and ample drainage. Where the loss is great, a few sutures sewing mucous membrane to skin, creating a defect, but helping to cover up raw edges, is admirable treatment, and likely to lead to much more rapid healing (Figs 1 and 2). A wound of the face always looks much worse than it really is, for swelling of the parts occur remarkably quickly, and it is amazing to notice how such wounds heal, and how much less scarring and deformity results than was at first anticipated.

Fig. 1
Mucous membrane sutured to skin. Two days later.

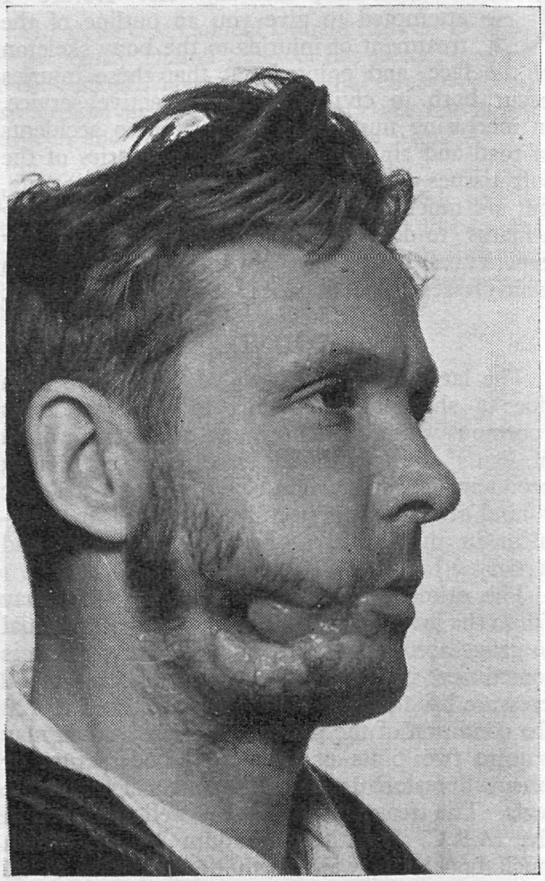

Fig. 2
Three weeks later

The second phase of treatment is the care of the wound till healing occurs. Frequent dressings of saline or eusol, with vaselined gauze for cavities and sinuses. An excellent method, especially when the jaws have to be immobilised for fracture, is continuous drip washouts of the mouth with saline, allowing the overflow to emerge from the drainage tube. This keeps the mouth sweet, and appears to have a very beneficial effect on the wounds also.

The third phase is the reconstructive phase, and this must be delayed for three to six months after healing is complete, to allow all scar tissue to settle down and soften. The first step in such a reconstruction is the excision of all scar tissue, and it is only when this has been done that a correct

estimate of the tissue lost can be arrived at. The most ideal method of repair is by local flaps, which most approximate to the colour and texture of the tissue required, and these may be of four varieties—advancement flaps, swinging flaps, rotation flaps and transposition flaps. It is difficult to describe these, but I will illustrate them in diagrams and photographs. Only when these have been exhausted should one consider skin imported from a distance by pedicled flaps, tubed or otherwise, and only if these are inapplicable should recourse be made to a free graft—a razor graft or a full thickness dissected graft. Each case has its own problems and the best method of getting a good functional and cosmetic result may tax the ingenuity to the utmost.

Wounds of the cheek and lips can best be repaired by local flaps, but if the loss is too severe a tube pedicle from the chest, or from the abdomen, transported by temporary attachment to the arm, may be required. Wounds of the nose may require a partial or total rhinoplasty from a forehead flap (Figs. 3, 4, 5). It is vitally important to remember that if one of the mucous-lined cavities is opened, the provision of a covering is not sufficient, and a lining of mucous membrane or inturned non-hairy skin must also be provided. Otherwise the covering will shrink to ridiculous proportions from contraction of fibrous tissue on its deep surface.

Fig. 3
Early condition of wound

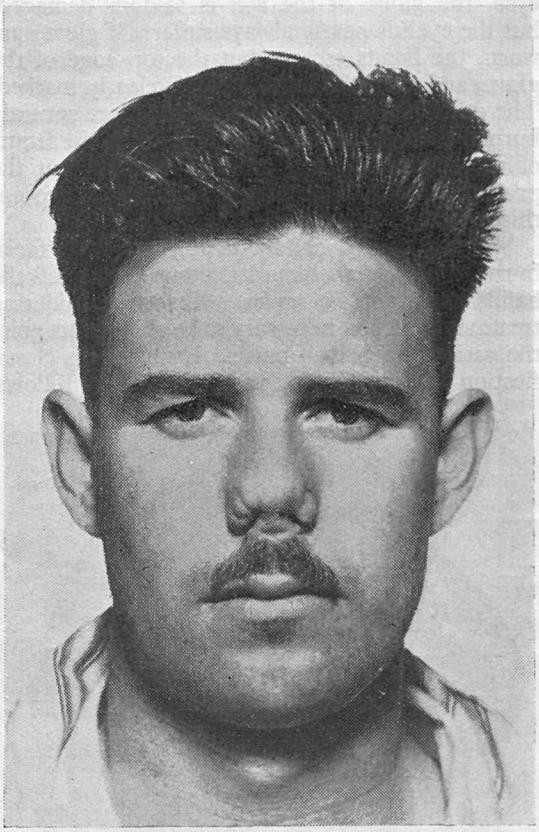

Fig. 4
After healing. Note loss.

Eyelid losses are not uncommon, and in these cases the eye is usually lost also. Many varities of flaps have been designed to replace portions of eyelids, and once again a lining must be provided. If the eye socket is not sufficiently deep to receive an artificial eye, it may be deepened by the application of a thin razor graft on a stent mould, the new cavity being kept distended for six months, until all tendency to contraction has passed.

BURNS

Burns form a big group of cases referred to the maxillo-facial and plastic units. Some are due to the effects of explosion, some to burning oil on the water, and others to fires in aircraft in battle

or on crashing. In most instances there has been an exposure to intense heat for a short period of time. The distribution of these burns has been remarkably constant, affecting the exposed parts only in most cases. In airmen if the helmet is worn the parts of the head and neck covered by it usually escape, otherwise a total burn of the head and neck is likely. Owing to reflex closure of the eyes, the globe of the eye is seldom damaged, but the eyelids nearly always suffer. If gloves are worn, the hands escape, but the top edge of the glove, and even the buttonhole, is clearly marked. The dorsal surfaces of the hand are more severely burned than the palms. In some cases the fronts of the thighs and legs are also burned, but the protective value of clothing is sufficient to prevent this in many instances.

We are to-day chiefly concerned with facial burns, but a few remarks about burns of the hands may not be amiss. Before considering treatment it is first necessary to be able to recognise the various degrees of burns. Dupuytren's classification is well known, and is briefly as follows.

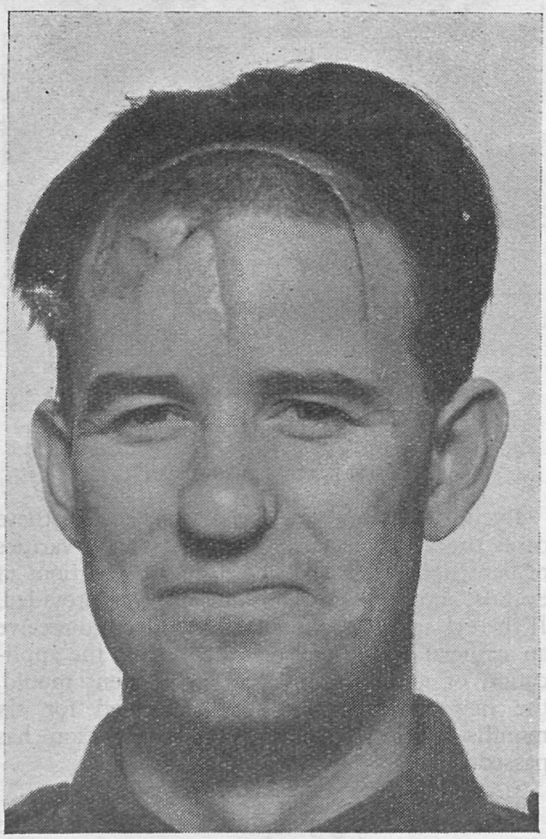

Fig. 5
Shortly after rhinoplasty

First degree, erythema ; second degree, vesication ; third degree, partial destruction of dermis, or cutis vera ; fourth degree, total destruction of dermis ; fifth degree, deep fascia and muscles involved ; sixth degree, charring. As the fifth and sixth degree burns are of academic interest only in most cases, it is preferable to use the American classification, which recognised only three degrees, namely, erythema and vesication, partial destruction of the dermis, and total destruction of the dermis. As in the first two degrees epithelialisation is rapid, the third degree is the important one. It is recognised by a grey, dead-looking appearance in the burnt areas. As in the case of wounds of the face, the treatment is divided roughly into three phases—primary, secondary and tertiary.

In the primary period shock calls for energetic treatment, on the lines already laid down above, with this important difference. As there is no loss of blood, blood transfusion is definitely not indicated. The symptoms and signs of shock are due to loss of plasma from the burned surfaces, outpouring of plasma into areas affected by heat, and possibly into other parts. The viscosity of the blood increases and the hæmoglobin percentage will be above normal. Fortunately, we now have at our disposal the one obvious remedy—that is, human plasma. Sufficient of this is given to restore the blood pressure and the hæmoglobin to normal limits, while morphia and other measures to combat shock are applied. When the condition of the patient is satisfactory, treatment of the burned area can be contemplated, it having been temporarily covered with warm saline or sodium bicarbonate compresses. Gas burns, chemical burns and electrical burns require special methods, which I have not time to consider to-day.

In the memorandum issued some time ago by the Ministry of Health the treatment recommended for burns was as follows : Clean the burned area, piece by piece, under anæsthesia, with saline, and not with ether or spirit or soap, all of which produce further exudation of plasma. Apply an antiseptic such as a mixture of gentian violet (1 per cent.) and brilliant green (1 in 2,000). Apply a coagulating solution, such as 10 per cent. silver nitrate, 5 per cent. tannic acid followed by 10 per cent. silver nitrate, or 20 per cent. tannic acid, by swabbing. Further plasma may be required, and continuous glucose saline may be needed up to 80 hours. Cortin (2 c.c. intravenously) or the synthetic desoxycorticosterone acetate (5 mg. intramuscularly) is valuable, and oxygen through a B.L.B. mask. The patient is nursed under an electric cradle, and antiseptics are applied to the edges of the coagulum several

times a day. The coagulum begins to separate in the first or second week, but may remain adherent to deeper burns for as long as six weeks. Sepsis may develop under the coagulum, and the coagulum should then be removed, with the help of 3 per cent. saline, or if necessary under anæsthesia. In places where exigencies of nursing and equipment do not allow of this method of treatment, tannic acid jelly compresses may be permitted after thorough cleansing. To apply tannic acid without cleansing as a first aid measure is very undesirable, as this militates against proper cleansing under hospital conditions.

There can be no doubt that tannic acid and similar coagulants have been of inestimable value in reducing the mortality of burns as a whole, and that this therapy is of tremendous value in reducing fluid loss and making the patient comfortable. Furthermore, in first and second degree burns excellent results are obtained, and when the tan separates a fine pink epithelial surface is found underneath, which gradually thickens to the thickness of normal skin. But even in such mild cases the eyelids often fail to heal under the tan, for constant movement causes a cracking of the tan at an early date, and infection quickly supervenes. In third degree burns infection under the tan appears to be inevitable, and cases frequently arrive with high pyrexia, and pus pouring from under the eschar. I cannot agree with those who think it wise to leave such a coagulum in place, for whereas occlusive dressings are known to be effective in assisting the healing of deep wounds, young epithelium does not grow well in the presence of pus, and normal skin may actually ulcerate under an occlusive dressing.

From the cases we have seen there is good reason to believe that tannic acid is definitely harmful in burns of the hands—at least, in those cases where the burn is of such severity that the coagulum encircles the hand. There is no doubt in my mind that a tannic acid crust contracts, while at the same time œdema occurs underneath, and in these cases the history is always one of intense throbbing in the fingers as the days go on, until a stage is reached when the fingers become numb. The inference is obvious, and we have now seen several cases where the tips of the fingers have become gangrenous and dropped off. I am able to show pictures of a Polish flying officer, to whom General Sikorski recently paid a visit to bestow a decoration, in whom the fingers are seen to be bulging through a crack in the caogulum, rather like a weak spot in a balloon. His hands are now terribly stiff, though the burn was only second degree. It is sometimes suggested that the original burn is responsible for the gangrene, but it is odd that this should be most marked at the tips of the fingers, when the hands are usually closed at the moment of the accident; and, as I have said before, the dorsal surfaces suffer more than any other part.

The R.A.F. have taken such a serious view of this matter that coagulation therapy is absolutely banned in burns of the hand as a primary measure. We are also coming to the view that coagulation therapy is undesirable for burns of the face, for the reason that infection so frequently occurs under the crust in the case of third degree burns, and almost always around the eyes.

It is suggested that the initial treatment should be limited to saline packs or intermittent saline baths, and that if coagulation methods are then deemed advisable, gentian violet or triple dye should be applied, if necessary reinforced with sterile gauze, but never in such a way as to encircle the fingers. There are at various units

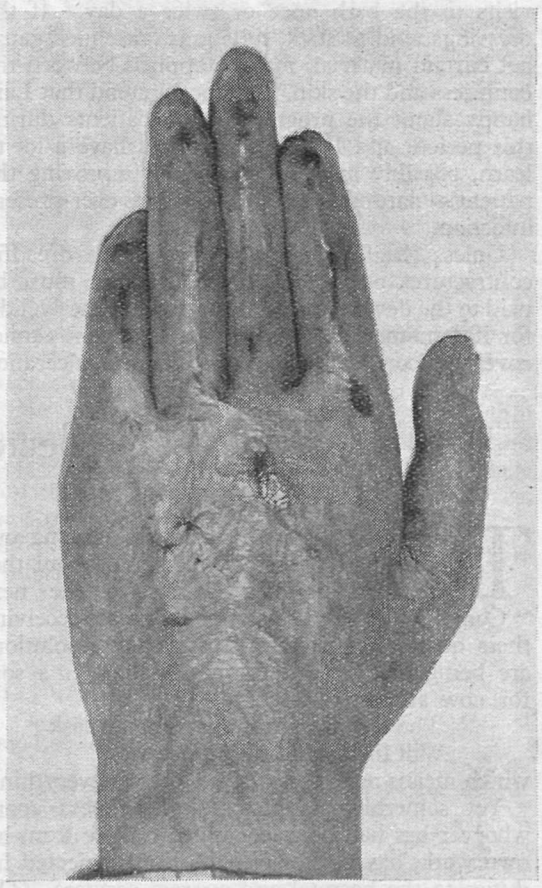

Fig. 6
A ruined hand. All joints stiff.

in the country thermostatically-controlled saline baths into which the whole patient can be placed, but it is obvious that these are not of much value for burns of the face.

The secondary phase in the treatment is taken up with attempts to get the raw areas healed in the quickest possible time, or into such a condition that grafts will take. One of the most difficult subjects in the realm of skin grafting is the preparation of a burnt raw surface for grafting. As Colebrook has said the granulating area can be visualised as something like the coastline of Norway into all the indentations of which bacteria have crept and taken hold. The subject is also wrapped up with the problems of preventing infection in an open ward, with possible methods of implantation from the air, dust on the floor, instruments, dressings and the hands and throats of the attending personnel.

During this period reliance is placed upon saline (normal or 3 per cent. hypertonic), sodium sulphate (12 per cent.) or eusol compresses, with visits to the bath once or twice a day. If the dressings tend to stick, tulle gras (vaselined gauze net curtain material) may be applied between the compress and the skin. I cannot pretend that I am happy about the progress of the patients during this period, and I feel that we still have a lot to learn, possibly in the direction of improving the patient's natural reactions to the ever-present infection.

Unless healing can be expedited dreadful contractures occur, and close attention must be paid to the development of ectropion of the eyelids, for if a moment arrives when the patient cannot cover his cornea during sleep, corneal ulceration will almost certainly occur, with the risk of blindness from corneal opacity, or even perforation of the globe, and emergency grafting operations may have to be undertaken, whatever the condition of the recipient area, to prevent this dreaded complication. At this time also ectropion of the lips may occur, and other deformities from contraction of scar tissue. Hands may become hopelessly crippled, from hyperextension at the wrist and metacarpophalangeal joints, and from that peculiar stiffening of the inter-phalangeal joints that I have drawn attention to at other times in relation to infections of the hand or any condition that prevents the patient from moving his fingers freely (Fig. 6).

The final phase is the phase of restoration, and it is again necessary to wait three to six months until all contraction has ceased before estimating and executing the necessary repair. The most frequent operations required are epithelial outlays for ectropion, whole thickness grafts for contracted upper and lower lips, forehead flaps for rhinoplasty, and occasional tube-pedicle flaps from the abdomen, migrated via the wrist, for more extensive replacements. It is impossible to describe these operations in so many words, but I will attempt to illustrate them by photographs and diagrams.

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Sector News

Guy's Letter

THERE are signs of uneasiness among our number. It is being whispered about that there are but five weeks to the next "Conjoint." So the sins of omission are receiving their quarterly review and quarterly resolutions are being made. For the sinful there is a sop, for now at Guy's—

"The trivial round, the common task
Will furnish all we need to ask,"

which means neglect of the books isn't everything.

Yet something is certain. Smugness apart, whoever has had his accustomed relapse from his own work, has not for one moment neglected his duties to the hospital and air raid services. The emergency will summon the men whether they are in the precincts or in adjoining premises.

Rumour has it that there is to be some sort of general post among the seniors of the sector. From here, we do not know yet who shall come or who shall go, so hands will be shaken and tears shed in our next letter.

Visitors to the Hospital sometimes see in the Park an American and a Canadian Ambulance. They inquire about them and are told with pride of their good work. Sometimes the ambulances are not present so the visitors do not inquire and are not told.

Guy's are to play Rugby against Farnborough on Wednesday, November 27th. It will be too late to tell of the result on this page, but we know a good tip . . . .

R. T. H.

Pembury Letter

SINCE our last letter there have been three newcomers to Pembury. Firstly, Bolton, who brings his mechanical acumen to the orthopædic department; secondly, McCall, who, complete with many talents, has joined the Children's Department; and thirdly, Lane-Roberts, who aids and abets the surgeons. We welcome them all and hope they will be happy in our midst.

Our student population is now settled and they form an integral part of the hospital life. As a padre recently remarked to us, "Your Guy's nurses and students change the whole atmosphere of a hospital." As a matter of fact our activities are not entirely confined to Pembury, because we are granted certain facilities at the Kent and Sussex Hospital. In addition, they allow us to conduct a pædiatric clinic, and we would like to express our gratitude for their kindness and consideration.

Certain phenomena lead us to believe there are divided opinions as to what sort of things "Sector News" should contain. Our own endeavour has been to report such events as affect all sections of Guy's personnel. However, we feel it would be a good thing if those who read these lines would express their views. A modicum of badinage and slating does us all a power of good.

N. M. J.

Farnborough Letter

IT is several months now since we reported that the maternity department had taken up residence in its new home, and expressed the hope that the children's wards would soon be moved to their new block. Still, however, this fine building remains empty and, while the inadequate black-out is a sufficient enough reason, it is a poor excuse after months of waiting. We have now been promised that this has been taken seriously in hand and should be completed shortly. So we hope that this time we really have not long to wait before it is possible for them to move across.

The hopes expressed in our last letter have been well satisfied. A second dance at "The Fantail" has been held with similar success, though the attempt to relieve the congestion by limiting tickets was rather sabotaged by numerous gate-crashers. The hockey is getting into full swing, as apparently are the players whose attitude when confronted with the ball or the position in which it was last seen, is much like that of a golfer in a troublesome bunker. For this the field is largely responsible, though the labours of a noble few with a heavy roller after the last game succeeded in removing some of its third dimension, and a mowing machine will, it is hoped, complete the transformation in a few days.

G. L. L. R.

Orpington Letter

DURING the past month, almost without our realising it, the number of cases in the Hospital has nearly doubled. This has been due partly to a large convoy from Farnborough, following their recent misfortune, but chiefly to small but regular convoys from Guy's and other Sector Hospitals. So for the first time since war began we are acting in the capacity for which we were originally intended—that of an Advanced Base Hospital, receiving cases from the Casualty Clearing Stations soon after they have been wounded.

We still, however, find time for less serious activities, and have recently held two very successful dances in the Mess.

Our Hockey goes from strength to strength, and we now boast two pitches, a fixture list and no less than seven teams—two from the Massage Department and one each from the Day Nurses, the Night Nurses, the R.A.M.C. staff, the K.C.C. staff and the Mess. The resultant Hockey is "mixed" in more than one sense.

A. T. M. R.

Notes on Peripheral Nerve Injuries

By H. R. Harley, Esq.

SOME POINTS IN EXAMINING CASES OF PERIPHERAL NERVE INJURIES

1. *Motor Functions.*—It is important to examine all the motor functions, agonistic and synergistic alike. Thus in cases of paralysis of the radial nerve voluntary extension of the wrist and fingers may be impossible, yet synergistic extension of the wrist may occur when the fingers are flexed. This would indicate a partial lesion and a good prognosis.

Trick movements may confuse the examiner. The following examples should suffice to indicate this. In injuries of the radial nerve extension of the wrist may be produced by flexing the fingers.

In cases of complete division of the median and ulnar nerves in the upper arm flexion of the wrist can be produced by the abductor pollicis longus, and flexion of the fingers by the extensors of the wrist. When the median nerve is completely divided in the forearm opposition of the thumb can be produced by the combined action of adductor pollicis and abductor pollicis longus. If the radial and musculocutaneous nerves are completely divided in the axilla, flexion of the forearm can be produced by pronator teres and the superficial group of flexor muscles of the forearm.

Palpation of the paralysed muscles is important. Such muscles have a characteristic feel, while tone and wasting can be estimated. The electrical reactions are not of much aid to prognosis because recovery in function is evident to clinical tests before they show any change. The limb must be warm and free of œdema when the electrical reactions are performed. If necessary massage should be given to render the limb in suitable condition. The surgeon should either perform the tests himself, or should see them done, so that he has a definite standard of comparison for the future.

The response to faradism is tested first, and if this is negative the galvanic current is applied. The response to galvanism should be brisk, while K.C.C. should give a better response than A.C.C. Reversal of polarity is valueless and may be neglected.

The electrical reactions are of particular value in excluding hysteria, and in testing the individual small muscles of the hand.

2. *Sensory Functions.* — There are several important points to remember in examining the sensory functions. The patient must be comfortable, the limb must be warm and non-œdematous, and the examination must never be hurried. If large areas of sensation are to be investigated, several short sessions will prove of more value than one long one. Both surgeon and patient are apt to tire, and the latter will become confused and will give incorrect responses. The areas of sensory defect should be demarcated on the skin with a skin pencil, and should then be transferred to a suitable chart. This gives an accurate standard for subsequent comparison. Repeated examinations will be necessary during the process of recovery, and on each occasion the findings should be charted.

It should be remembered that the patient who is too co-operative and the suggestive patient are both liable to give faulty information. Great care should be taken not to influence the latter.

Pain is tested with the sharp end of a pin. The latter should not be inserted too hard or it will hurt and antagonise the patient. Be sure that he feels pain and not pressure.

Light touch is tested with a whisp of cotton wool. The patient should be told to close his eyes and say " Yes " when he feels the cotton wool. This method eliminates suggestion. It is important not to tickle the patient. The sense of tickling is conveyed by pain fibres and not by touch fibres. Hairs may be stimulated and so mask an area of anæsthesia. If in doubt the area should be shaved.

Deep sensation is conveyed by nerves which accompany the tendons. If deep sensation is lost in the hand tendons are probably divided.

In peripheral nerve injuries, touch is usually lost over a wider area than is pain. In cases of nerve compression the sense of pain is lost before that of touch, resulting in dissociated anæsthesia.

DIAGNOSIS OF PERIPHERAL NERVE INJURIES, WITH SPECIAL REFERENCE TO HYSTERIA

Injuries to peripheral nerves must be diagnosed from vascular upsets, central nervous injuries and diseases, and hysteria. An occluded artery produces paralysis and anæsthesia. The latter is of stocking and glove type, rather like that of hysteria, but there will be other evidence of arterial occlusion. The following remarks on hysteria are based mainly on a lecture by Dr. J. Purdon Martin.

A hysterical disorder is due to the fact that the patient has a fixed belief that he has certain symptoms, and is not due to any discoverable organic cause. The condition depends upon an aberration of the unconscious mind. The latter functions in a similar manner to the conscious mind, though in a more simple and childlike way. The hysteric therefore always has a reason for his symptoms, though he is quite unaware of the fact. He is not a malingerer and must not be treated as such.

In order to diagnose hysteria two criteria are essential—positive evidence of hysteria, and negative evidence of organic disease. The former is just as important as the latter, though it is often overlooked. The symptoms and signs will always show some inconsistency which will differentiate them from those due to organic disease. It must always be remembered that hysterical manifestations may be grafted on to those of an underlying organic origin, and it may then be extremely difficult to unravel the two conditions.

The discovery of an underlying cause for the hysterical symptoms should be left to an expert psychologist, if it is attempted at all. The delving

into the mind of the patient which will be necessary often does more harm than good.

Hysteria is more common in ill-educated persons than in those of higher up-bringing. The latter usually have enough intelligence to see through themselves.

The mentality of the hysterical patient is often peculiar. He tends to be emotional and suggestive, though he frequently conceals these traits. Not uncommonly he accepts his malady with an air of complacence, and wears an angelic smile on his countenance. He uses his complaint to absolve himself from some unpleasant situation, and having achieved his aim is quite content.

Anæsthesia is of the glove and stocking type. It is usually sharply demarcated by a regular line, and pays no attention to segmental or peripheral nerve distribution. Unless great care is taken during the examination anæsthesia will be suggested to the patient.

Hysterical amnesia is a common symptom. It is usually transient, and may include only the brief period of the event initiating the production of symptoms.

Paralysis, like the anæsthesia, bears no relationship to segmental or nervous distribution. It tends to involve a whole limb or segment of a limb. Thus the patient may believe that his hand is paralysed, so that all muscles acting upon the hand are affected, whether extrinsic or intrinsic, and whether supplied by the median, ulnar or radial nerve. The patient can often be tricked by asking him to perform some act in which he does not realise that the paralysed muscles will be used. Thus a patient who cannot raise his leg from the bed may stand and bend down and touch his toes without difficulty. The motor loss frequently takes the form of weakness rather than paralysis. When the patient is instructed to perform a movement he contracts agonists and antagonists simultaneously. This results in no movement, or in jerky movement, occurring. He puts great effort into the attempt, and will contort his features with the strain. He will usually just fail to accomplish what is asked of him. All the muscle groups of the part tend to be uniformly involved. This is termed equality of paralysis. Muscle tone and reflexes, and the electrical reactions, will be normal.

Prolonged lack of movement associated with a hysterical paralysis may result in muscle wasting, joint stiffness, and trophic changes in the skin and nails. These features may lead to confusion with an organic lesion.

Tremour is a common symptom. Tremour is a natural reaction to fear, and this reaction may be exaggerated and prolonged by hysteria.

Contractures may occur. They are of instantaneous onset and result from muscle spasm. They are therefore not true contractures.

Visual symptoms are not uncommon. They take the form of blepharospasm and visual defects, both of which are often associated. The visual defect commonly gives rise to partial blindness involving the peripheral portions of the field of vision. Perimetry will always demonstrate an inconsistency in the visual field defect. Thus a patient may interpret blindness of the left eye as an inability to see the left half of the field of vision.

Hysterical deafness and other symptoms may also occur.

The differential diagnosis between hysterical and organic paralysis rests upon the following factors: The distribution and equality of the paralysis, the presence of reflexes and normal muscle tonus, the simultaneous contraction of agonists and antagonists, the lack of correspondence between the distribution of anæsthesia and paralysis, the great effort which the patient expends on attempting movement, and the fact that he just fails to accomplish the task requested of him, the presence of normal electrical reactions, and the presence of other evidence of hysteria.

Correspondence

Guy's Nurses at Pembury

To the Editor of the GAZETTE

SIR,—I was very pleased to read Dr. Grasby's letter in your last number. Such a literary effort made delightful reading, but even more so is it right that both sides of the picture should be presented. Much of what Dr. Grasby tells us is true, and nobody is more conscious than I of the upheaval, both mental and physical, caused by the descent of so many "foreign bodies" upon Pembury. I have never failed to express my admiration of the welcome we received. There are, however, some passages of that letter that I cannot let pass unanswered.

Firstly, I must challenge some of the remarks made, though indirectly, about the Guy's nurses. I cannot subscribe to the view that the Guy's wards are excessively staffed. You cannot have too much of a good thing. On the other hand, I believe Miss Wheeler and Dr. Grasby himself would welcome more nurses for the Pembury

wards. That the two nursing staffs did not get on together when they worked in the same wards is a fact that was duly recorded in the Pembury Letters of the time. I must also disagree that Guy's nurses are any more clumsy than any others. Of the fifty-three cups that were broken in a fortnight, a very high percentage met a sudden end simultaneously at the hands of a non-Guy's person. If, too, as we are told, the Maternity Department uses its napkins as dusters, the responsibility cannot be placed at our door, for no Guy's nurse treads the hallowed ground of that department!

There has, no doubt, been an increase in the breakages of syringes and thermometers, but there has also been an enormous increase in the numbers of nurses and patients using them, to account for it. Sometimes these breakages make considerable inroads on our stocks, as, for example, when 100 per cent. of our spinal manometers was destroyed by somebody dropping it.

We are told that the soap shortage was a "temporary restriction." Of course it all depends on the interpretation of the word temporary. Dr. Grasby suggests that I have used the Pembury Letter as a "medium for the requisition of ward supplies." That is not true. I cited these cases to illustrate that there had been some difficulties in the matter of supply, and I stand by that statement.

Finally I must take up the cudgels about using the phrase "There's a war on" to account for everything. It was used to explain the one-time accommodation for nurses, and the soap shortage, and yet within a few days or weeks of their being mentioned in the *Gazette* both were rectified. In war-time everyone must suffer some privation, but a hospital system is surely "one of the sinews of war," and nothing should be allowed to mar its efficiency. This fact I offer as my sole justification for raising controversial matters in the "Pembury Letter." They are never written with malice aforethought.

Yours, etc.,

N. M. JACOBY.

"Windflowers,"
Pembury,
Kent.

The Wills Library Books

To the Editor of the GAZETTE

SIR,—I was interested to read Dr. Campbell's account in the *Gazette* of October 19th of the steps taken to safeguard some of the books of the greatest value and historic interest from the Wills Library, and was glad to know that 256 old and rare books had been conveyed to safety. I had not remembered that the Wills Library contained so many treasures, since there was little time as a student for ought but the latest editions of the standard textbooks (always excepting Cunningham and Gray in old terminology). On behalf of one to whom the smell of old calf is as the breath of life itself, and the 1543 Vesalius more precious than rubies, may I ask you, Sir, to conspire with the Wills Librarian to publish a list of the books that have been sent to Wales.

Yours, etc.,

G. O. MITCHELL.

Poplar Town Hall,
E.3.

A Game of Bridge

To the Editor of the GAZETTE

SIR,—The following commentary on a game of Bridge, played this evening under the Dispensary, may prove of interest to Bridge enthusiasts.

North

Spades—A, K, Q, J, 10, 9, 8, 7, 6, 5, 4, 3, 2.
Hearts—Nil.
Diamonds—Nil.
Clubs—Nil.

West	*East*
Spades—Nil.	*Spades*—Nil.
Hearts—Q, 9, 8, 4.	*Hearts*—J, 10, 7, 3.
Diamonds—10, 8, 5, 4.	*Diamonds*—A, Q, J, 7, 2.
Clubs—A, K, 9, 6, 4.	*Clubs*—Q, 7, 3, 2.

South

Spades—Nil.
Hearts—A, K, 6, 5, 2.
Diamonds—K, 9, 6, 3.
Clubs—J, 10, 8, 5.

Both sides vulnerable. Dealer: North.

Bidding

North—Seven No Trumps.
East—Double.
South—Re-double.
West—!

Result

North and South T.C.I. and 6,400 down.

Yours, etc.,

D. H. COOK (North).
A. CHARLTON (East).
J. T. JENKINS (South).
O. HALAMANDRES (West)

Guy's Hospital, S.E.1.

Sport

Rugby

Guy's v. Middlesex Hospital

(At Honor Oak Park on Saturday, October 26th)

THIS was a hard game, and produced some really good football, the forwards and halves of both sides were well matched, but the three-quarters missed several opportunities of scoring. Once again the good work of Guy's forwards in the loose enabled Harrett and Strathie to make several attacks.

Guy's led at half-time by eight points to nil. Costa Halamandres, home on leave from the Royal Navy, and playing in the pack, gathered a high dropping ball from a cross-kick to dash over for an unconverted try, a most brilliant bit of opportunism. Camp had bad luck in not scoring in the far corner, but the flag was up for a line-out close to the corner-flag. However, Camp succeeded in touching down later on, and Mullins had a sitter in front of the posts.

The second half was full of incidents. Middlesex pressed hard with some good forward play and close passing, until Guy's were penalised in front of the posts, from which Cullen scored an easy penalty. Guy's went further ahead when Camp went over for a try, which Mullins converted. Then came a try by Steeds for Middlesex, which was converted by Cullen.

The best try came in the closing seconds when Camp wriggled himself away from a loose maul, broke clear, passed to Fuller, who immediately returned it on being tackled, for Camp to run in unmolested. Mullins converted with the last kick of an enjoyable game; the final score being Guy's, 3 goals and 1 try (18 points); Middlesex, a goal and a penalty goal (8 points).

Team.—Harris; R. F. Camp, T. L. T. Lewis, D. W. F. Charlton, P. C. Gartrell; D. M. Strathie, P. D. V. Harrett; C. Vidot, W. F. Osmond, D. N. Fuller, J. C. Bulstrode, C. Halamandres, M. R. Mullins, A. G. Albers (captain), T. M. Renton.

Guy's v. Metropolitan Police

(At Honor Oak Park on Saturday, November 2nd)

HAVING beaten four hospital sides, Guy's had their first real test when they entertained the unbeaten Metropolitan Police. The visitors arrived with the distinction of having beaten Rosslyn Park and St. Mary's, two excellent performances.

Metropolitan Police have made a big contribution to war-time rugger in London, and can always be relied upon to play entertaining football. Their record since the war started stamps them as a side worthy of a place in the first class fixture lists, and if they can maintain the standard that war-time football has revealed, it is certain that they will be well rewarded when the peace-time fixtures are being compiled.

No doubt the Police were anxious to avenge the defeat we inflicted on them last season, but Guy's were equally determined to keep their unbeaten record intact. This led to a really hard game, full of incidents, and quite exciting. It was no disgrace for Guy's to be beaten by 10 points to nil, but the margin slightly flattered the winners, although on the score of taking their chances, and Guy's missing theirs, they deserved to win.

The game started in a drizzling rain, which continued throughout, with a strong wind blowing from the pavilion end. It was grand to see the stand about three-parts full.

Guy's had the wind in their favour in the first half, but failed to take advantage of it. They played the right game in kicking to touch whenever possible, and they had more of the ball from the set scrums, owing to Sharpe's excellent hooking, but many promising movements were frittered away by their own errors. On the other hand, the Police marked and tackled with determination, and Guy's had many anxious moments when they had to defend their line. Guy's had slightly the better of a pointless first half.

On change of ends the sides continued to be evenly matched, until Pridmore put the Police ahead with a neat drop-goal following several scrums in our 25. A little later Pridmore scored a penalty goal.

Guy's tried hard to pull the score back, and with tremendous confidence in their pack decided to take scrums for line-outs. This often led to some dangerous attacks, but the finishing was woefully weak. From one of these, a dropped pass gave the Police a chance, and Masters went over for an unconverted try. Thus, an excellent game ended with Guy's, nil; Metropolitan Police, a dropped goal, a penalty goal, and a try (10 points).

Guy's had a well-balanced pack. Mullins was outstanding as the best forward on the field, Sharpe's hooking was excellent, the halves (Harrett and Strathie) were always in the limelight, and the latter had a classic duel with Pridmore.

Team.—T. L. T. Lewis; R. F. Camp, D. W. F. Charlton, R. U. F. Kynaston (captain), P. C. Gartrell; D. M. Strathie, P. D. V. Harrett; J. P. Rochford, R. M. Sharpe, D. N. Fuller, J. C. Bulstrode, J. D. Everall, M. R. Mullins, A. G. Albers, C. Vidot.

Rugby Fixtures, Season 1940-41

1940		*Opponents*	*Ground*
Sept.	28	Charing Cross and Royal Dental Hospital	H.O.P.
Oct.	5	St. Bartholomew's Hospital	H.O.P.
„	12	—	
„	19	London Hospital	Hale End
„	26	Middlesex Hospital	H.O.P.
Nov.	2	Metropolitan Police	H.O.P.
„	9	King's College Hospital	H.O.P.
„	16	St. Mary's Hospital	Teddington
„	23	Aldershot Command	Aldershot
„	30	St. Bartholomew's Hospital	H.O.P.
Dec.	7	Rosslyn Park	H.O.P.
„	14	Wasps	H.O.P.

1941			
Jan.	4	Metropolitan Police	H.O.P.
„	11	Middlesex Hospital	Chislehurst
„	18	Oxford University	Oxford
„	25	Cambridge University	Cambridge
Feb.	1	London Hospital	H.O.P.
„	8	Wasps	Sudbury
„	15	Aldershot Command	H.O.P.
„	12	Rosslyn Park	Old Deer Park
Mar.	1	St. Mary's Hospital	H.O.P.
„	8	Bedford	Bedford
„	15	St. Thomas's Hospital	H.O.P.
„	22	An Army XV	H.O.P.

H.O.P.—Honor Oak Park.

Hospital Information, etc.

Notice

SOCIETY OF APOTHECARIES OF LONDON

The Society's Examinations for the month of December are as follow :—

Surgery, December 9, 11, 12.

Medicine, Pathology and Forensic Medicine, December 16, 18, 19.

Midwifery, December 17, 18, 19, 20.

Pass List

ROYAL COLLEGE OF SURGEONS OF ENGLAND
L.D.S.
FINAL EXAMINATION
October, 1940

Part II. Dental Surgery

D. Wright

UNIVERSITY OF LONDON
THIRD (M.B., B.S.) EXAMINATION FOR MEDICAL DEGREES
October, 1940

Pass

Old Regulations

A. D. Bell — D. M. Douglas
P. W. Clarkson — J. Wills

Revised Regulations

O. C. Fung — K. O. Rawlings
H. A. Kreiser — J. A. E. Watts

Group I. Old Regulations

P. H. Beales — J. R. D. Williams

Part I. Revised Regulations

E. B. Dawe — R. J. Stanley
B. J. Fowler — P. N. Swift
J. C. Holman — St. J. M. A. Tolhurst
H. P. Jones — P. C. van der Westhuizen
H. L. Joyce — H. W. Wheate
T. McKeown — J. A. Williams
S. Muntarbhorn — C. W. Wilson
R. E. Rewell

Papers by Guy's Men

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Ryle, J. A. To-day and To-morrow. *Brit. Med. J.*, 1940, *ii*, 657.

Changes of Address

D. P. King, Major R.A.M.C., 10th General Hospital, c/o A.P.O.

Russell J. Reynolds, C.B.E., F.R.C.P., 40, Harley Street, W.1. Telephone : Langham 1011.

Marriages

DYKES—CLARKE.—On September 11th, 1940, at Agra, India, Captain Douglas Oswald Thomas Dykes, to Madeleine Mary (Biddy) Clarke (Q.A.I.M.N.S.R.).

CHAPPLE—HOBBS.—On November 9th, 1940, at the Parish Church, Broughton, 2nd Lieut. Harold Arbuthnot Lane (Archie) Chapple, The Wiltshire Regiment, elder son of Mr. and Mrs. Harold Chapple, of 149, Harley Street, W.1, to Sheila Charlestrom, younger daughter of Dr. and Mrs. Geoffrey Hobbs, of Broughton, Hants.

Deaths

PARRY-JONES.—On November 15th, 1940, Maurice Parry-Jones, M.D., at 5, Wellswood Park, Torquay, age 81 years.

RANDALL.—In November, 1940, by enemy action, Charles William Randall, L.D.S., R.C.S. Eng.

EDS. { N.A.N. B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

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PASSIM

ONCE again the enemy have descended upon us from the air in a concentrated attack more furious than anything yet attempted. This time different kinds of bombs were used, since in addition to their incendiary nature, there was incorporated an explosive feature which made them much more dangerous and difficult to deal with. The whole sky around Guy's was lighted up by a brilliant array of colour, serenaded by the explosions of our guns and their bombs.

In spite of the severity of the attack and its concentration in our area, Guy's Hospital presented an unaltered appearance to the morning sun next day. This is indeed a very lucky escape, made all the more thrilling by the news that a land mine had fallen within a few hundred yards of us but that its parachute had been caught up on a certain structure, preventing the mine from touching the ground. It is said that the mine weighed two thousand pounds, contained twelve hundred pounds of high explosive, and boasted of no less than seventeen detonators. However, the bomb disposal squad dealt with this menace in their own inimitable way.

The fire and ambulance workers deserve a great deal of recommendation for the brilliant way in which they performed their duties. Without regard for their personal safety they carried on, full knowing that where they were called to was indeed an enemy target. Nevertheless, the wounded were carefully and methodically extricated from the debris and delivered at the Front Surgery door, on which, until lately, had hung Lord Nuffield's bulletin proclaiming "business as usual."

Inside the surgery was a completely altered state of affairs. Instead of the usual O.P.O., a dresser for the men's side and one for the women's side, and a few nurses, a large reception staff consisting of medical officers of all ranks, numerous dressers each with his allotted job to do, and a good supply of nurses, waited in cool readiness for any emergency. The steady stream of casualties were sorted, according to the type and degree of his or her injury. In the reception ward the beds and blankets are kept warm, and the radiant heat cradles kept aglow twenty-four hours a day; in addition, there are always immediately available facilities for transfusion and infusion, so that these badly-shaken air raid victims were able to have their necessary rest, warmth and fluids without delay.

Our surgeons rendered expert by actual experience in this war, carefully chose the suitable cases for operation and operated ceaselessly without regard for personal fatigue. In fact, the entire procedure from the admission of a casualty to his evacuation, when fit for the journey, was carried out with commendable time-tempered smoothness.

In these days, when daily stress and anxiety tend to colour our views and opinions about things and people, it is very easy to become discouraged with oneself and one's colleagues. However, it is just such an occasion as that described above, with everyone pulling in harmony, that tends to restore faith in one's fellows and just as long as that sense of comradeship exists, democracy can never die.

▭

WITH the Christmas season approaching, it is gratifying to watch the various kinds of entertainment and parties springing up throughout the Sector. Farnborough is probably our leading exponent of this art of spreading good cheer, with Pembury and Orpington tied for second

place. Although Guy's itself has been somewhat dormant in this respect, it is to be hoped that she too will resume this pleasurable business.

Now that Guy's people are scattered over all the corners of the earth, the *Gazette* is often their only means of keeping in touch with what is happening to their friends and colleagues. In view of this fact, out readers are invited to contribute any item of news, either about themselves or otherwise, which they believe might be of interest for publication.

GUY'S Christmas cards are now on sale in the Counting House at Guy's and at the various Sectors and the Medical School.

In most cases the whole of the proceeds are given to the Hospital and in others the profit, so by purchasing these cards the Hospital funds benefit.

Obituary

ERNEST R. P. HOMFRAY, O.B.E.

ERNEST R. P. HOMFRAY was appointed first Appeal Secretary to Guy's Hospital in February, 1920.

He had previously been Secretary, under the Chairmanship of Sir William Hale-White, of Queen Mary's Royal Naval Hospital at Southend-on-Sea.

His innate courtesy, modesty and sincerity of purpose quickly endeared him to all at Guy's and ensured that whole-hearted co-operation which was to last until his retirement in 1936.

He entered into all the activities of the Hospital. With the help of the Students' Committee he organised successful flag days and was a Father Confessor to very many of the men. The Matron and Nursing Staff found him a delightful colleague and one who could always appreciate the particular needs of the nursing profession.

The appreciation of Sir William Hale-White and Mr. Hughes, who knew him so well at Southend, was also shown by all the members of the Medical, Surgical and Dental Staffs.

He was a member of the Committee of the Guy's Employees' Association.

In 1933 he founded with others the Guild of Ex-Patients which has gone from strength to strength, the present membership being over 8,000 enrolled members. He remained the Hon. Treasurer until the time of his death. It was his delight after his retirement to come to Guy's and make a round of visits to his old colleagues, discussing hospital matters and retaining his keen interest in all that affected Guy's.

He had been, until bad health prevented, a very keen golfer.

While at Guy's he joined the Rotarians and gave many talks on the history of Guy's and its modern needs at their luncheon meetings.

He died on Nov. 25th, 1940, peacefully in his sleep while staying with his brother at Wokingham.

With his passing goes one more of those gracious characters who have added so much to the spirit and good name of Guy's.

H. J. B.

Cases of Gunshot Wounds of the Jaws, Treated 1914-1918

A Clinical Lecture delivered at Guy's Hospital on Monday, 11th November, 1940, by F. N. Doubleday, Esq.

GENTLEMEN,—Mr. Eckhoff has recently delivered two admirable lectures on "Injuries of the Face." He has lent me his manuscript and I have learnt much from what he has written.

This is an account of some lessons learned in the treatment of wounded soldiers during the four and a half years of the last war. For the last two years I had the dental charge of a floor of five hundred beds. Among these patients, about fifty were of severe gunshot wounds of the face and jaws, complicated by similar injuries to other parts of the body. From the photographs and skiagrams which I now show upon the screen, you will see the severe loss of soft tissue and the extensive destruction of the bony parts which occurs in these cases. Some of the lessons which experience taught are as follow.

It may easily happen that a battalion medical officer or an officer in a casualty clearing station will be the first to give aid to such a case. We dental surgeons begin by cleaning such wounds as carefully as circumstances permit. Special examination is made for any loose fragments,

such as teeth, etc., and to see whether the tongue or any other injured part may obstruct respiration. If necessary a ligature should be put through the tongue and the ends attached outside the mouth. If the patient is young and has sound standing teeth, the best form of first aid may be to ligature the teeth of the lower jaw to their opposite numbers in the upper jaw, so that the mandible is articulated to the maxilla and so kept at rest. This gives great comfort to the patient and is done by passing silver or brass wire, or any form of ligature, silk or catgut, round the necks of the selected upper and lower teeth separately, and then uniting the upper and lower ligatures so that the teeth are held in position. Such ligatures can be quickly divided with a pair of stout scissors if any emergency arises. Further aid is given by a support to the chin. The War Office Report on Maxillo-Facial Injuries[1] expressly condemns the use of fourtail bandages and advocates the use of roller or Hamilton bandages. This, however, is not a universally received opinion. Mr. Walter Wood of Brighton has recently expressed this view[2]: "I was fortunate in learning my bandaging from that master of art, Sir Chartres Symonds, and a four-tailed bandage put on in the correct way, as demonstrated by him, is one of the most efficient supports of the lower jaw. The whole secret lies in using a 3 in. linen or domet bandage, splitting the tails in two parts, one 2 in. wide and the other 1 in., to within 2 in. of the centre line of the chin, and making a slit about 2 in. long in the middle portion to fit over the prominent portion of the chin. The 2 in. tail is then carried from as far back as possible towards the angle, vertically upwards in front of the ear to the downward forward slope of the vault of the skull. The remaining 1 in. tail is then carried back to the occiput, and the two tied together in the usual way. The great point is that the vertical portion alone is used to support the lower jaw and the horizontal part only to assist in keeping the remainder in correct position, which does not necessitate using sufficient force to drag the chin backwards. Of course, any form of bandage, especially in connection with the lower jaw, must be applied by using brains as well as fingers." This I believe to be a true view. When the case comes under the care of a dental surgeon he will continue the treatment by the application of cast metal splints. The medical officer may have already influenced treatment in certain ways. This case illustrates a surgical disaster. This man was wounded by a hand grenade during the battle of the Ancre and, as you see, the flaps of soft tissue were drawn together by the surgeon at an early stage in treatment. They united firmly, but the result was a horribly disfiguring appearance which it took many months of great difficulty, and of great misery to the patient, to rectify. If such a patient comes under your treatment at an early stage it is much better to be content to keep such flaps in position and to leave them to be dealt with in the base hospital, which the man is likely to reach in a very few days. Another point is the preservation of the bony parts, and of the teeth as much as is possible. In the first year of the last war great harm was done by the undue removal of what were taken to be loose fragments of bone and of teeth. Many of these are still nourished and are of great value in helping to build bridges of bone over these extensive gaps. Really valuable work on the repair of fractures was done by Macewan[3] before the last war. He demonstrated that the function of the periosteum of bone was to act as a limiting membrane, and that the formation of membrane bone took place by means of osteoblasts. Comparing his treatment of bone fractures with the results which he obtained by experimental work upon dogs he demonstrated that in a clean fracture, where the periosteum was practically intact, the amount of ensheathing callous formed was very slight. Where the periosteum was torn so that at some places gaps in it were present the callous at these points was excessive. When the periosteum was torn and carried in over the fractured ends of the bones, no bony union took place, the periosteum acting as a limiting membrane and preventing the joining of the fractured ends. A dental histologist, J. Howard Mummery,[4] has attributed a similar role to the columns of epithelial cells, the sheath of Hertwig, which grow down into the connective tissue of the periodontal membrane and act as a limiting membrane, mapping out the area in which the calcified dentine and cementum of the root is deposited.

Macewan's results were confirmed in Toronto by Gallic and Robertson.[5] Further experimental work making clear the process of calcification and of decalcification has been done by Wilton[6] in the Caroline Institute in Stockholm, and is worthy of careful study. The process of healing in fractures has been reviewed more recently by Stirling.[7] He observes that successive radiological examination of fracture in a long bone shows: (1) A thin clear line seen at the site of fracture. (2) The line, or space, between the ends of the fragments has widened, and the bone edge presents a "moth-eaten" appearance. (3) Callus is formed, wide at the site of fracture and narrowing as it extends up and down the shaft. The line of fracture is still visible. (4) The callus, shaped like a plumber's joint, is more dense, and the fracture line obliterated. (5) The excess of new bone,

both inside and outside the cortex, is removed, and the marrow cavity is restored. He believes that the essential factor in the healing of a fracture is the maintenance of an undisturbed blood clot. This does not in any way contradict Macewan's observations upon the importance of the osteoblast, since these cells have been poured out into the clot. Stirling advances evidence to show that the administration of compounds containing ergosterol or vitamin D, or of ductless glands extract, has not hastened union in uncomplicated fractures nor has it produced union in ununited fractures. But the drilling of holes into the ends of the ununited bone has done so in clinical cases, on account of the resulting formation of blood clot. He believes that the essential cellular reaction is the formation of granulation tissue consisting mainly of elementary mesoblastic cells in the form of fibroblasts, which under the influence of physical and chemical stimuli may become cartilage cells or osteoblasts. Dr. C. P. Stewart, making bio-chemical examination of the fluids from Mr. Stirling's cases, showed in a series of eight experiments upon dogs and four upon human patients that following fracture fluid aspirated from the region of the fracture gave an acid reaction for the first four or five days, and that the Ph then swung back to the alkaline side, reaching its maximum at about the twelfth to the thirteenth day. He believes that the acid reaction is associated with the absorption of the fractured ends of the bone corresponding to the "moth-eaten stage" in the skiagrams, and that the subsequent alkaline phase is associated with the activity of the phosphatase, since this enzyme will not act in an acid medium but is most active in an alkaline medium of 8.4. The normal development of these reactions is hindered by sepsis and by the introduction of metallic wires, plates or screws into the fracture area. From what has been said you will see that the main principles of surgical practice are true here. Drainage must be provided and maintained; in gunshot wounds loculi containing foreign bodies and pus pockets often cause great difficulty in drainage. The bony parts must be kept at rest, undue interference with the wound is to be avoided. We cannot secure a local Ph of 8.4 nor by the administration of activating agents hasten the repair of the parts, but if we fully understand what is going on we can, by our intelligent care, set the stage and the body will do the rest. To understand what is occurring and to avoid fretful interference are the great secrets of success.

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A Case of Deep Cervical Abscess Simulating Bezold's Mastoid

By C. de W. Gibb, F.R.C.S.(Edin.)

I FIRST saw the patient on September 27th, 1940, on the operating table prepared for a mastoid operation. He was a boy of six years and convalescent from diphtheria. He had not had earache or otorrhœa. A few days ago a palpable lymphatic gland was noticed below the tip of the left mastoid process. His temperature was 101 and the pulse proportionately rapid. He did not look really ill. The left auricle stood out almost at a right angle and there was a swelling behind and below the left ear, most prominent below the angle of the jaw; movement of the head was painful, and the swelling and surrounding region were exquisitely tender. The left retro-auricular groove was not obliterated. There was wax in the left meatus which was removed by syringing, and then the tympanic membrane was seen to be normal. There was tenderness on pressing over the mastoid antrum, and behind the middle and tip of the mastoid process, which was simply a part of the general tenderness. Hearing tests with the watch and whisper were the same with both ears and appeared normal. In mastoiditis I have always found a decided diminution of the hearing capacity ever since I heard Mr. Layton stress this point.

Under a general anæsthetic I made an oblique incision over the most prominent part of the swelling and found brawny thickening of the subcutaneous tissues, and when the incision was deepened pus welled up from the centre. A Spencer-Wells forceps was inserted and opened, when a quantity of thick pus poured out, and then a finger was put in and the cavity explored. There were no pockets or ramifications, and the deepest part of the cavity was just under three inches from the skin edge, and was in the situation of the tonsillar lymphatic gland.

The swelling in this case looked very much the same as that in a Bezold's mastoid on which I had operated three days previously, but was different on palpation. In this case I was not able to detect fluctuation, just a hard brawny diffuse swelling. The fact that the tympanic membrane was normal in appearance did not exclude mastoiditis.

The patient had been examined by two doctors, who called me in to perform a mastoid operation, both of them experienced and accustomed to diagnosing mastoiditis frequently and correctly.

The detection of the palpable gland below the tip of the mastoid process and the absence of earache and otorrhœa were important in the history.

Points of interest to us are that the most important diagnostic feature was first stressed by a Guy's man; the method of opening the abscess and the instrument used were both inventions of Guy's men.

A Plaster Neck Splint for the Treatment of Tuberculous Adenitis

By H. A. Ripman

WHEREAS it is generally recognised that tuberculous cervical adenitis should be treated with rest, fresh air and good food, there still seems to remain some diversity of opinion as to the degree of immobilisation implied by the term "rest," and the place for surgery in these cases.

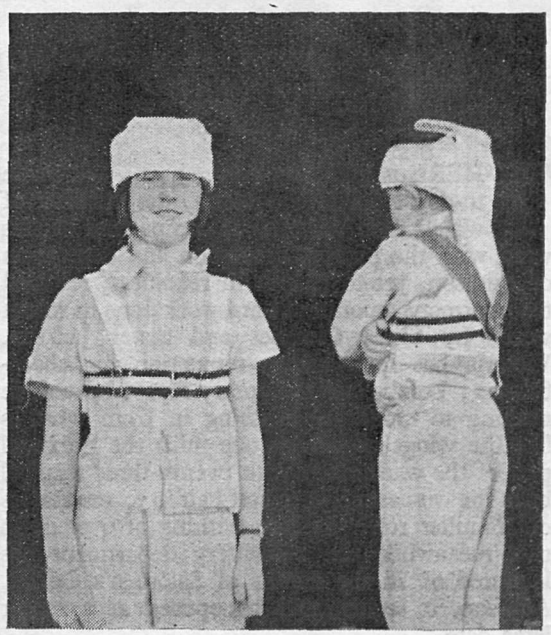
In the Children's Department at Pembury it has been the custom to refrain from surgical interference unless and until the glands break down and are about to break through the skin. Under these conditions the cold abscess is incised, and the asepsis of the resulting wound insured as far as possible.

In those cases which are undergoing rest therapy, neck splints are applied, thus bringing into line the treatment of tuberculous cervical adenitis with that of tuberculous disease elsewhere (*i.e.*, maximal rest to the affected part).

The method of neck splintage up to date has been by means of an L-shaped splint (the vertical limb passing up the back and neck, and the horizontal limb passing forwards along the vertex), bandaged to the patient round the thorax, neck and head. While a fair degree of immobilisation is achieved in this way, this method has certain disadvantages. To attach such a splint firmly to the patient, a considerable length of bandage is required, the removal and reapplication of which is a laborious procedure. Because it tends to become loose, the bandage slips down over the patient's face, requiring constant adjustment, and the degree of immobilisation frequently diminishes. Finally, with the neck constantly swathed in bandages, it is difficult, without their removal, to watch the progress of the glands, and should they break down, to dress them.

It is with the elimination of these faults in mind that I have recently designed and made a light plaster neck splint, which has given sufficient satisfaction to justify a brief report on its details.

As will be seen from the accompanying photograph, it consists of a back splint of Cramer wire, fixed above to a plaster crown, and below, in the



mid and lower thoracic region to a saddle. This latter part is bound to the patient by a simple slightly-elastic belt, joined in front with an " S " hook and ring. The weight of the plaster is borne by a pair of broad tapes passing over the shoulders, attached at the back in the midline, and in front in the nipple line on each side, to the belt. It seems of the utmost importance that the plaster should be as light as possible, and that what weight there is should be borne in this way. It is obviously futile to rest the neck by limitation of movement if the regional muscles are going to be in constant spasm supporting a heavy load. I would also emphasise that the patient should be made to hold a good posture throughout the making of the splint, for the position adopted while the plaster is wet determines the position to be maintained by the patient for as long as he or she wears the splint, and this may be a considerable length of time.

One or two points of technique have evolved in making these splints, and these are briefly detailed below :—

1. The Cramer wire, having been bent to fit the curves of the spine and occiput, is lightly swathed in plaster bandage. This insures that the junction with the crown and back slab shall be firm, at the same time adding rigidity to the back splint.

2. When making the crown (which is lined with plaster felt), a certain number of turns should be passed round the head before the back splint is incorporated. This makes for a much more closely-fitting crown and consequently much greater immobilisation.

3. When making the saddle, the patient lies face downwards, and a thin piece of plaster felt, cut approximately to shape, is placed on his back. The plaster bandage is then wound to and fro across the back and round the sides, incorporating the Cramer wire at about the middle of its thickness. While it is still wet the patient stands up and the slab is moulded into shape.

4. The finished article can be lightened by trimming, as a small saddle is perfectly efficient. If it reaches as far as the mid-aixillary line, the immobilisation is maximal, and the splint can easily be slipped on and off.

5. To attach the belt to the saddle, the belt is tightly stretched across the back of the plaster and sewn to the felt lining at the anterior margin of the saddle. The braces are sewn to the belt at the back, and to facilitate adjustment and removal, attached by pins in front.

It has been found that the immobilisation achieved with this splint is almost complete ; that the trouble to the nursing staff in applying and removing it is minimal ; that the progress of the glands can be closely followed and, should it be desired, dressings easily applied. Finally, the patients (mostly children) tolerate it well, wearing it day and night without complaint or loss of sleep.

My thanks are due to Dr. Jacoby for permission to use his cases.

Sector News

Guy's Letter

THERE is good news to report. We made to-day a visit to Victoria, the opening of which is imminent. A comparison of this ward with the present desolation and depression of Addison, yet to be put in readiness, revealed the enormous amount of hard work done in recent weeks by Sister Chrimes and Sister Jackson. Victoria has long had a reputation for cheerfulness ; bombs and temporary disuse have done nothing to cloud it. Passing in from what is like the wings of a stage one finds the proximal part of the ward ready with twenty-three medical beds for women. The distal half is to resume its old familiar role. It is something of a triumph that meanwhile the Midwifery department has laboured on in the depths of Salomen's Centre. Addison, it seems, will be opened at a rather later date.

Last week we promised to mention certain staff and house changes. Mr. Kilpatrick has left for Pembury from whence Mr. Harley has come to Guy's, while Mr. Glover and Mr. Ram have gone to the now repaired Seamen's Hospital. We welcome Mr. Harley and say farewell to the other three gentlemen.

A recent benefaction of two hundred pounds given to Guy's by friends in America has defeated the U-boats. If at the old canteen in the Out-patient Hall we could take a cup of tea or soup or even a glass of milk before bed, we are now to have the luxury of any brand of anything that a new " corner house " can give. And three members of the W.V.S. will give it us.

The Guy's *v.* Farnborough Rugby match played last week ended in a win for the opponents and thus the tip we did not publish in the last letter gave us the winner. A return game will be played shortly.

R. T. H.

Pembury Letter

THIS is the time of year when the sturdy male dons his winter woolies, and the female changes from a "three-thread service weight" to a nice "full-fashioned cashmere." If Lord Woolton regulates our calories "in," it is our duty to regulate them "out."

On a recent dark and dirty night our anæsthetist, Dr. Pyddocke, drove her car into and under a large lorry. Although she did not escape unscathed, we understand her injuries are not serious and we wish her a speedy recovery. Things might have been much worse, because the aforesaid lorry is reputed to have contained ammunition! To fill the hiatus thus caused in our staff we have been glad to welcome our Farnborough contemporary in the person of G. L. Reynolds.

By the time this letter appears in print, Mr. Harley will have left us for Guy's and Mr. Kilpatrick will have made the same journey in the opposite direction. We understand that "Establishment" is the magic word that explains this swop. The sorrow at our loss is compensated only by the pleasure at our gain.

N. M. J.

Farnborough Letter

GEOFFREY REYNOLDS has left Farnborough and gone to Pembury; this seems to be the chief item of news, for its immediate consequence is that the authorship of the Farnborough letter has changed hands and the present writer finds himself flung, quite unfledged, into the unfamiliar role of a gossip columnist. Moreover, Reynolds, in addition to being the *doyen* of the Residents' table here, was a leading light in the social activities of these parts, so that the contents of these letters, as well as their style, may be profoundly modified by his departure.

So far as the work of the Hospital is concerned, everybody seems to be kept comfortably busy. A steady stream of pneumonias is flowing into the medical wards and there is a minor outbreak of Sonne dysentery in one section of the huts, which is giving some of us occasion to brush up—and endeavour to apply—our scanty knowledge of the subject known as Public Health. The surgeons are remarking on a striking decline in the incidence of appendicitis, but are finding plenty of prostates to keep them occupied—a subtle commentary, perhaps, on the age-distribution of our clientele.

On the lighter side, existence has been enlivened this last week by a dance and a game of mixed hockey against the local R.A.F. and W.A.A.F. The former, judging by the crowd encountered in a nearby hostelry during the interval, was well patronised, and the latter furnished an interesting display of both ladies' sports wear and of skilful hockey, the result being a win for Guy's. Details are given elsewhere of a new venture in the dancing line sponsored by our Social Committee.

V. C.

ANNOUNCEMENT

There is to be a Christmas Dance at the Bromley Country Club on Thursday, December 19th, from 8.30 p.m. to 12.30 a.m. All members of Guy's are invited to this function, but it is essential that tickets be obtained in advance. The price of these is 2*s*. double and 1*s*. single. Personal application should be made to W. Trethowan or P. Merrick at the County Hospital, Farnborough; postal applications should be addressed to P. Merrick at 12, Croydon Road, Keston, Kent, enclosing postal order and a stamped addressed envelope. It is hoped that all sections of the Guy's community will take this opportunity of meeting old friends and colleagues.

Orpington Letter

WEDNESDAY afternoon is sacred at Orpington. The Housemen disappear from the wards, the Theatres are empty, and the Superintendent is away from his office.

On the fields, far above the Hospital, the whole medical staff is gathered, clad in a medley of strange garments. The hockey match is in progress and the shrill blast from the referee gives brief respite to the speed of the game. On the last occasion feeling ran high, for, if fortune favoured us, we should win the league. Major Philpott had chosen his team well and was bent upon defeating the Mess. It was a fine match. The ball was at first flung from end to end of the field, but later we pressed hard and won the game by three goals to nil. Our forward line did splendid work, with Dr. Campbell keeping the ball against every challenge, Clarke doing great deeds on the wing, and "Bishop" Budd as a back frustrating every attack with his ferocious charge. Hammond may well feel pleased with such a successful conclusion to the season of 1940.

We now have a new member on our staff. Mr. East has come down to help with the general surgery and we hope that he will find the material satisfactory, because at present much of the surgery is of a specialist nature. Sometimes there is poaching amongst the pundits. Recently we caught our Gynæcologist stealthily removing a hydronephrosis, but could not accept the excuse that it might have been an ovarian cyst. Behold, this was

followed by a hysterectomy being ably performed by our Genito-Urinary Surgeon. Revenge or not? We cannot tell.

Sport is only a part of our antidote to the melancholy effect of the "black-out." The Muse herself would be delighted to pass down the long corridor to our Mess. The romantic beauty of Wagner comes from one room, lovely themes of Mozart from another; then, alas! the anticlimax: from the far one comes the ceaseless strain of wild gypsy melodies.

C. F. H.

This Medicine

By "Stanley"

Physician (to H.P.): Anything in?

H.P.: Four, sir. Two pneumonias, an acute rheumatism, and a stout lady who seems full of complaints, but I can't make much of her.

Phys.: Well, let's have a look at her.

H.P.: She's up in Dorothy, sir.

(They mount the staircase and enter the ward.)

Phys.: Ah! here we are. Now, tell me what you are complaining of.

Patient: Well, doctor, I seem to git pains all over me. It starts up 'ere in me 'ead, sir, and then seems to shoot into my right elbow and dahn into me left foot. Then I come over all queer and I can't eat me food. All I've 'ad since last Toosday is a bit o' bread an' butter, and it seems to turn to lead in me stummick. And the awful wind, sir! It comes up in big bulches and then I feel a bit easier.

Phys.: Well now, let's examine you.

(Proceeds to carry out a routine examination.)

Phys. (to H.P.): I can find nothing. Have her gall bladder X-rayed, and let her have a barium meal and enema. Then a blood count and hæmoglobin estimation, as well as a blood culture. In addition to an ordinary urine examination, get a catheter specimen and have it cultured. Then she'd better have a fractional test meal. You might have a sugar tolerance curve taken at the same time. She's fifty-five, but perhaps it would be as well to get an A—Z test on her urine. You never know. Get the eye people and the gynæcologist to see her. If anything else occurs to you, get that done too. Have a full report ready for me when I go round on Friday.

H.P.: Very good, sir.

* * * * *

(Physician arrives on Friday, is met by H.P. and goes round. He arrives at "Mrs. 14.")

* * * * *

H.P.: Here are the reports on this case, sir.

Phys. (reading): Mphm! G.B. and alimentary canal normal. Blood count normal, colour index .8, culture negative, urine normal, test meal normal, sugar tolerance normal. Not pregnant. Eyes presbyoptic, 1.75 spherical, uterus and appendages normal. Anything else?

H.P.: I can find nothing organic at all, sir. The main trouble seems to be a multiplicity of symptom and a paucity of lesion.

Phys.: Ha, ha! Haven't heard that expression for twenty years. Thought it was very funny the first time I heard it when I was a fourth-year student. Well, what are we going to do? Send her out and write to her doctor. Suggest some bromide and valerian, unless you can think of anything else. Yes, I don't mind. Sp. ammon. fœt. if you like. Now I must be off. I've got an appointment at 4.30.

* * * * *

Three weeks later in "The Sunday Sobster":

"THEY SAVED MY LIFE.

I shall Gladly Recommend them to all my Friends."

Slushton-on-Mud Woman's TERRIBLE ORDEAL in Hospital. Now QUITE WELL.

DRAMATIC TESTIMONY TO TORULA Brand Corpse Revivers.

Slushton-on-Mud.
April 1st, 1950.

Dear Sirs,—It gives me great pleasure to have this opportunity of giving my humble testimony to the benefit I have received from your marvellous Torula Brand Corpse Revivers.

I had a very serious illness with complications and was treated in hospital, where they took blood from me, put a tube into my stomach, and X-rayed me ten times without the slightest relief to my awful sufferings. When I was discharged from hospital I went home, as I thought, to die.

I heard a lot about your Torula Brand Corpse Revivers from a neighbour and at last decided to try them. Before I had taken half a box of them I felt a new woman and I am glad to be able to tell you that I am now quite well. I shall gladly recommend them to all my friends. They saved my life.

Yours truly,
(Sgd.) Mrs. F.

ACCEPT THIS OFFER!

If you have Spots Floating before the Eyes, Pains in the Back and Loins, Dimness of Vision, Headache, Rheumatism, Gastric Ulcer, Acid Stomach, Pernicious Anæmia, Sub-acute Combined Degeneration of the Cord, simply obtain a Ninepenny bottle of Torula Corpse Revivers. If you are not cured in 24 HOURS, return the empty carton and your money (less Purchase Tax) will be refunded!

Reviews

Surgery of Modern Warfare. Edited by HAMILTON BAILEY, compiled by sixty-five Contributors. Published by E. & S. Livingstone, Edinburgh. To be completed in about four parts. *Price* 12*s.* 6*d. each part.*

THE list of contributors to this latest surgical work is indeed imposing, and on this account alone it commands serious attention. The collected writings of the many well-known authorities whose names figure in the list will form a sure foundation for the book and will constitute a sound reason why it should be of great value to anyone practising war surgery. In such a field of contributors, however, it is not to be expected that individual articles will be uniform in their attainments and many must fall short of the standard set by the select few. The onerous task of editing a work of this type is well appreciated, but in Part I now under review there is evidence that the editor has failed to prevent even diametrically opposed views being expressed in different chapters. Such failings are almost inevitable in works by large numbers of authors, and it is as a whole that the work must be judged and its usefulness assessed.

The book is intended for surgeons "trained, but not necessarily highly experienced, in civil general surgery," and aims to provide guidance for them in all branches of war surgery. In present times, when young surgeons with no previous experience in the surgery of warfare are being called upon to deal with casualties both civil and military, such a publication is highly desirable. There can be no disagreement with the editor's opinion that in these circumstances much valuable time would be lost by awaiting the assessment of recent experiences and the findings of various committees before publishing such a work. All the young surgeon can ask is a collection of articles by recognised authorities embodying their experience of the last Great War, together with the application to war surgery of the advances in thought and deed that have developed up to the present time. There should be little doubt that on its completion this book will serve that purpose.

Part I of the book is now published and deals with the general and special considerations of wounds. It is perhaps premature and a little unfair to review this part of the work before completion of the whole volume; nevertheless it must be said that as a whole Part I failed either to inspire or to impress the reviewer. It is difficult to decide from the text of this part whether the book is intended for the undergraduate, the house surgeon or the operating surgeon. Nowhere are the fundamental principles of wound surgery expressed as clearly as the reviewer would wish them to be taught to dressers, and at the same time there is a complete absence of discussion on controversial subjects which should surely be granted to those with surgical specialist qualifications.

In the editor's note there occurs the extract, "the rational classification of war wounds or some standardisation was sorely needed," yet this chapter in the book is most disappointing. The object of any classification should be to simplify, and not to complicate, its subject; the tabular classification of war wounds given in Chapter II, however, has the appearance of a genealogical tree of the House of Tudor, suitably complicated by the many wives of Henry VIII. The chapter on Shock is also disappointing. There is no adequate discussion on the relative indications for the use of blood, plasma and serum in the treatment of the shocked patient; nor is any attempt made to indicate the criteria by which one judges the optimum time for operative interference in such a patient. The account of the technique of Transfusion and Infusion is unnecessarily long and is made complicated and confusing by the description of numerous types of apparatus. War burns are dealt with in a good, if rather dogmatic, chapter by C. P. G. Wakeley, and the local treatment of recent and infected wounds is well set out in chapters by H. H. Sampson and Seymour Barling. Cole's well-known work on tetanus constitutes an admirable chapter, and when completed, McIndoe's article on skin grafting promises to be among the best in the book.

The publishers have done a splendid piece of work. The appearance of the book is excellent, with good paper, clear type and beautiful plates.

The reviewer looks forward to reading Part II and subsequent parts of the volume, when it is expected that the material still to be presented will allow of words of greater praise being written about the book as a whole.

S. H. W.

Venereal Diseases. By E. T. BURKE, D.S.O., M.B., Ch.B., Director of L.C.C. (Whitechapel) Clinic. H. K. Lewis & Co., Ltd. Pp. 550. Demy 8vo. *Price* 30*s.*

IN this excellently produced new volume Dr. Burke expresses freely his essentially individualistic views. These views, which are vivid in style and provocative in concept, are set out at length on many aspects of the course and treatment of the venereal diseases.

The reader is forewarned, and rightly so, by the author's frank admission in the preface that some of his opinions will be considered to be at variance with current teaching. In general this work covers a wide field reasonably thoroughly, but the author's interest is perhaps a little capricious, and concerning some conditions of importance, *e.g.*, Optic atrophy, Ocular muscle palsies, Balanitis, Non-gonococcal urethritis and Chancre redux, little instruction of practical value can be found.

The laboratory investigations and the interpretation of their results are dealt with fully and lucidly, including the method of dark ground illumination and the Lange gold-sol reaction. The techniques of lumbar and cisternal puncture are well described and illustrated.

The volume is enriched with six superb colour plates and many excellent illustrations. In some instances the reproduction of microscopic sections illustrating the pathology of syphilis would be of greater instructional benefit if the accompanying legends were more informative; also the degree of magnification employed should be stated.

The toxic effects of arsenobenzol therapy are rather meagrely dealt with in proportion to their importance and the size of the volume. There is no mention of aplastic anæmia or arsenical peripheral neuritis. Considering its frequency, the deleterious action of arsenobenzols upon the liver receives brief attention. No mention is made of the value of testing for the presence of urobilin or of the van der Bergh reaction in suspected jaundice or of their help in deciding when treatment may be resumed after apparent recovery from toxic jaundice.

It is surprising in view of the heavy dosage advocated with arsphenamine—one gramme each week for thirteen weeks—that no direct warning is given of the possibility of a fatal outcome from acute hepatic necrosis.

Jaundice receives some later consideration in the paragraph on hepatic syphilis, where the view is advanced that this complication is mainly of catarrhal type in a person whose hepatic function has been affected by both syphilis and arsphenamine. This would imply that there is little or no risk in the treatment of syphilis in its primary stage, whereas toxic jaundice shows little variation in incidence or severity in relation to the stage of syphilis.

The skin of the patients from "the Boro'" is evidently more sensative than that of the Whitechapel population for the amount of arsphenamine advised would be followed by that boiled lobster appearance indicative of arsenical dermatitis in a disturbing number of our clientèle. The morbidity and mortality from toxic effects following the author's treatment are not stated.

In his scheme of treatment with arsenobenzol and bismuth compounds the author favours the method, widely used in the U.S.A., of alternation of short periods of treatment with the respective drugs. This is in contrast to the intermittent method usually employed in this and other European countries, in which both arsenobenzol and bismuth treatment are given during the same week for two to three months, followed by an interval with no treatment. The details applicable to the various stages of syphilis are clearly tabulated. The utilisation of a lipo-soluble bismuth preparation is preferred to the more common suspensions.

In devising the schemes of treatment the chemotherapeutic values of the various antisyphilitic remedies are taken into consideration and the value of the chosen drug is expressed in "therapeutic units," and finally the total amount of treatment is indicated by an "Efficiency Index" expressed in figures. A minimum for the "Efficiency Index" is insisted upon below which treatment must not fall or disaster is courted. Attention is drawn to the need for the setting up of an international standard of chemotherapeutic values for all the compounds used in the treatment of syphilis. Such an event would meet with general approval.

Dr. Burke does good service in calling attention to the importance and frequency of cardiovascular involvement in syphilis. There are, however, some statements which are unlikely to be subscribed to by cardiologists, *e.g.*, that cardiac and aortic involvement are invariable in tabetics; that direct invasion of the heart muscle by spirochætes is the commonest visceral lesion in syphilis; or that aortitis and endocarditis are common in congenital syphilis. The latter statement also is at variance with the author's

list of the order of frequency of lesions in congenital syphilis in which these are not even mentioned.

The account of the general management of syphilis during pregnancy contains sound and practical advice. The basic difference between the two sexes in their response to syphilitic infection is emphasised at length in an attractive manner. The author regards male and female, metabolically and biologically, as different soils, chiefly on account of the higher lipoid content of the tissues of the female throughout the reproductive period when her response to injection with syphilis is much less severe than that in the male, especially as regards the cardiovascular and nervous systems. Treatment with arsephenamine is advised throughout pregnancy. Little information is given on the prognosis of the child, particularly when treatment is not commenced until the later months of pregnancy.

The clinical description of congenital syphilis in infancy, on which the student needs thorough instruction, is portrayed in a somewhat restricted manner.

There will be little general agreement with the implication that the cutaneous effects of maceration in the still-born syphilitic infant are always the direct result of syphilis. The misleading impression is also given that such lesions as mucous patches, condylomata and eczema oris syphilitica occur commonly in the *new-born* infant, whereas these conditions are exceptional under the age of one month.

Advice as to how and when these syphilitic infants should be treated is clear and sound. The author believes in thorough and prolonged treatment for at least five years.

The views expressed on the behaviour of the gonococcus are unusual and unlikely to be accepted by the majority of bacteriologists, who would certainly consider much of the reasoning as basically unsound.

The author challenges the widespread belief in the intra-cellular location of the gonococcus, and prefers to visualise it as clinging to the external surface of the leucocyte. He ignores the common observation that after rupture of gonococcus-laden leucocytes the cluster of gonococci remains in the vicinity of the shed nuclei and is not left attached to the remains of the cell membrane, or that gonococci are rarely observed on the periphery of a leucocyte but almost always within the contour of the cell membrane.

The formation in cultures of involution forms of the gonococcus deeply impresses the author who, after some discussion of this and other organisms, is led to consider that the gonococcus may undergo alterations in shape, size and staining reaction *in vivo* as well as *in vitro*.

Several pages are allotted to personal views on these aspects, concluding with the concept that, in chronic infections, the gonococcus can finally become a harmless symbiote in the genito-urinary passages where later, under certain but unspecified influences, it is capable of assuming virulence again and giving rise to gonorrhœa.

There is also a strong implication that gonorrhœa may arise *de novo* without infection from a second person. Such a view is more likely to be received with acclamation by the patients at venereal diseases clinics than by the medical staff. However, in the clinical sections, when the mode of infection is under discussion, there is no further reference to this unorthodox outlook. In fact, the author apparently now agrees with general opinion, which regards with some cynicism the possibility of infection occurring other than as a result of the sexual act.

The chemotherapy of gonorrhœa receives full consideration in this work, but starts uneasily with some confusion in the relation of sulphanilamide to "prontosil album"; the latter is described as an amino substituent of sulphanilamide, but the two compounds are of course identical. The use of various sulphonamide compounds is described, including sulphanilamide, sulphapyridine (M. & B. 693), Uleron and Albucid; the formula given for the latter needs correction. The reference to such a low dosage as one gramme daily for sulphanilamide is presumably a misprint, for such an amount is completely ineffective.

Of the sulphonamide compounds Sulphapyridine (M. & B. 693) has given the best and most consistent results. He finds about 90 per cent. of acute cases respond satisfactorily whatever the duration of the infection and relapses are infrequent.

There are adequate accounts of chancroid ulcer and Trichomonas Vaginalis infestation, together with the appropriate treatment; also an interesting chapter on the pyrexial treatment of gonococcal arthritis with the Kettering hypertherm.

In spite of some inconsistencies and occasional lack of proportion this is undoubtedly a live stimulating work, provocative to the postgraduate and expert but less suitable for the undergraduate who, in his introduction to this speciality, needs guidance on standard principles rather than marked individualism.

V. E. L.

Wound Infection. Edited by W. H. OGILVIE, M.Ch., F.R.C.S. The *Lancet* War Primer. *Price 2s. 6d. net.*

THIS small publication consists of the collected reprints of a series of articles written for the *Lancet* on the causes, prevention and treatment of wound infection. Mr. Ogilvie writes a historical introductory chapter on the problems of wound infection; Colonel Whitby deals with the biological aspect of wounds; and Dr. Cruickshank writes on their bacteriology. Antiseptics and chemotherapy are discussed in chapters by Professor Garrod and Major Buttle respectively, whilst surgical principles and procedure are admirably expressed in two further chapters by Mr. Ogilvie. The little book is concluded by three short appendices on antisera, sulphonamides and the treatment of burns.

The book is very aptly called a War Primer and as such it should be read by all concerned with war surgery, from the humble student to the surgeon himself. No better expression of the fundamental principles involved could possibly be desired and in present times, when such a spate of nonsense is being talked and written about war surgery, it comes as a most refreshing change. Mr. Ogilvie points out that there are still many problems of the surgery of warfare to be solved, but progress in this type of surgery can only be made by thorough mastery of the principles involved and by their scientific application by the processes of test and trial. It is important that experiences should be recorded, but from much of the current literature it appears that little advance is being made. Some of the articles are evidently written with the object of being first in the field and of personal advertisement; others are equally valueless by virtue of rash and completely unjustified assumptions, which in fact are doing great harm by swinging the surgical pendulum in a definitely retrograde direction. When people can find time to argue in the medical press the meaning of the word "debridement" and to dispute the originator of a particular method of treatment, it is evident that they have lost sight of the important basic principles involved. There is a great danger that surgical progress may be much retarded by blind adherence to set methods of treatment, to the exclusion of their common sense application in the individual case. Mr. Ogilvie makes this point extremely well in his discussion on the plaster immobilisation of injuries; yet when no lesser body than the E.M.S. itself tries to stifle individual thought by distributing unjustifiably dictatorial circulars, it is time not only to rid the bonnet of its bees, but to clear the mind for reasonable thinking. Tannic acid is not nearly so black as it is painted, nor yet sulphonamide so white as to purify wounds if the underlying surgical principles of their treatment be neglected. If the Red Sea of blood were suddenly to be depleted of half its volume its buoyant power could not be restored by the addition of plasma; on this point alone it would be well for the writers on Shock to think clearly. Let us utilise some of the saline we do not use for treating unsuitable cases of burns to wash the mind, and thus allow of clearer thinking and saner application of our knowledge; then only will progress be made and perspective be attained. No better stimulus to this end can be imagined than the Primer on "Wound Infection."

S. H. W.

Hospital Information, etc.

Papers by Guy's Men

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Cameron, H. C. Congenital Syphilis. *Clin. J.*, 1940, **69**, 315.

Macintosh, R. R., and another. Apparatus for giving Intravenous Anæsthetics Continuously. *Lancet*, 1940, ii, 650.

Harding, H. E. Incubation at 44 deg. C. in the Examination of Water Supplies. *Ibid.*, 662.

Changes of Address

E. H. Rink, Major, R.A.M.C., 4th General Hospital, Knutsford, Cheshire.

Birth

BARLOW.—On Nov. 25th, 1940, at Woodside Nursing Home, Crapstone, Yelverton, to Phyllis Barlow, wife of Surgeon Commander Noel Barlow, R.N.—a sister for Wendy.

Marriage

TARGETT—HILLMAN.—On Nov. 20th, 1940, at St. Andrew's, Ham Common, Surrey, Walter Kendell Targett to Eveline Hillman.

Death

HOMFRAY.—On Nov. 25th, 1940, at Wokingham, Ernest R. P. Homfray, O.B.E.

EDS. {N.A.N. B.S.L.

GUY'S HOSPITAL GAZETTE

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PASSIM

WE wish our readers a Merry Christmas this year under conditions vastly different from those which we enjoyed a year ago. Last year, lulled by a false sense of security, there was an atmosphere of artificial gaiety about the entertainments: there was little then in London or in England to indicate the magnitude of the war, and there was plenty of wishful thinking to soothe the guilty conscience. Our jobs themselves were still sinecures and our greatest worry in life was whether the luxurious scale of salary then enjoyed by house officers would continue. This year, by way of contrast, the temptation is to take things too seriously. We have seen the horrors of total warfare waged upon the civilian population, and we can visualise what the future must hold before victory is won. It is not surprising that the spirit in our big cities is one of grim determination rather than one of merrymaking. Nevertheless, periods of relaxation are essential both for health and for efficiency; so far as blackouts and shelters, rations and restricted travel allow, a day of rest and quiet enjoyment should provide a mental tonic for our citizens. Christmas Day in hospital is always devoted to the entertainment of the patients; we can no longer rise to the heights of the old "Nigger" days, but it is doubly important this year that we should do our utmost to cheer our patients, whose cheerfulness in the face of great adversity shows how futile is the enemy's plan to destroy our civilian morale.

THE inevitable controversy concerning young doctors who are not in uniform continues fitfully to raise its head in the medical press. The ever-expanding armed forces are short of medical men and the urgency of this need cannot be denied. The extravagant "locum" fees that can be obtained to-day are an indication of this shortage throughout the country. At the same time, it cannot be denied that there are a large number of doctors of military age, who have completed house appointments, but who have not joined the forces. Since, however, all such doctors are liable for conscription for service wherever they are required, the point at issue is really one of correct distribution and fullest possible use of the available material. So long as the weight of the enemy's attack is directed largely against the civilian sections of the population, it is essential that the best and most efficient treatment for casualties should always be available, for the efficiency of such service must of necessity have repercussions upon the level of civilian morale. It is possible that the treatment of civilian sick in hospital could be entrusted to a combination of young house officers and elderly practitioners, under the supervision of consultants, and that general practice could be effectively continued by a reduced number of doctors of over a certain age. It is very doubtful, however, if the air raid precaution services could be maintained without a due proportion of younger men, and certainly a large part of the burden of the treatment of air raid casualties has been borne by men of registrar standing, supported by younger medical officers. Although interspersed by long periods of quiescence, the treatment of these cases has on occasions become a very severe test of endurance, and it must be remembered that the number of cases has never approached the figures for which the Ministry of Health had prepared, and which may yet occur. These same men are in many cases largely responsible for the training in methods of that steady flow of medical students that is necessary if the present shortage of doctors is to be rectified. This apparent shortage is encountered in the Emergency Medical Service as well as in the Armed Forces; for its alleviation, it is necessary that the medical man and woman power of the country should be surveyed, if necessary redistributed, but certainly used to its

utmost capacity. As has been pointed out recently in another journal, much medical talent is wasted in secretarial and administrative duties that could profitably be performed by lay persons. This applies both to civilian as well as to Service medicine, and possibly even to our own hospital.

As the end of the year approaches, we are thankful that Guy's has been enabled to maintain unbroken its record of service to our district. The out-patients' departments have functioned in full throughout, and at all times we have been able to deal with the air raid casualties sent to us. The in-patient treatment of civilian sick has necessarily been reduced in capacity, but has also continued almost without a break: every effort has been made to maintain a high standard of treatment, both at the mother and also at the base hospitals. In spite of the decentralisation and distribution of our students and nurses throughout a large sector, there is plenty of evidence that the spirit and tradition remains intact. We are very jealous of our standards, but we are not too proud to learn: rather we welcome the possibility that the sector system has given for a wider interchange of views and methods, and we hope that both our own and also the other hospitals throughout the sector will benefit from it.

THE Ministry of Health have sanctioned the appointment of two "trainees," who have finished their house appointments, to be called Clinical Assistants in Pathology, in each sector. The pay commences at £200 and rises to £350 after eighteen months in the Laboratory. Any Guy's man who wishes to undertake this class of work is invited to discuss the matter with Professor Payling Wright.

ERRATUM: Mr. Eckhoff's clinical lecture which appeared in the last issue, page 345, line 37-41, should have read "If the lower jaw is fractured in two places . . . . . such a patient must on no account lie on his *back* unattended.

Some Skin Diseases Common in War Time

A Clinical Lecture delivered at Guy's Hospital on 23rd September, 1940, by L. Forman, Esq., M.D.

GENTLEMEN,—The story of the skin diseases seen in such large numbers during the last war in France was that of the infective and contagious dermatoses. The conditions which obtained then are being paralleled now in this country. Thus there are some areas where there is difficulty in obtaining hot water for washing, people are having to travel in crowded conveyances, some are having to share sleeping apparel, and many are occupying and sleeping in crowded air raid shelters. The opportunities for acquiring infections are being multiplied. Again lack of sleep, lack of hot food, will lower the resistance and immunity of the skin to bacterial infection. The standard of cleanliness is apt to be lowered during periods of fatigue.

In the army during the last war there was a considerable incidence of seborrhœic infections with accompanying staphylococcal infections, provoked by a high carbohydrate diet (containing large amounts of jams, puddings, biscuits, etc.).

Whenever there is dislocation of the intricate mechanism of food transport, particularly that of fresh fruit and vegetables and fresh meat, recourse has to be made to tinned food.

A large percentage (over 40 per cent.) of the population were already at the lower level of vitamin intake, and are therefore liable from the dermatological point of view to develop skin conditions which are due to lack of vitamins, particularly A, B and C. Fortunately this danger has been well recognised, and food campaigns on the Wireless and in the Press have emphasised the importance of adequate intake of vitamins in the form of easily obtained fresh foods, and advice has been given as to the best methods of cooking them to obtain the maximum nutritional value.

Some vitamins may be synthesised in the laboratory. In the case of Vitamin A preparations of high potency can be readily made and distributed.

I am glad to notice that a committee has been formed under the presidency of Lord Horder to study conditions in public shelters which might well be most dangerous centres for the propagation of infectious skin diseases.

The diseases which I propose to consider can be grouped in four categories :—

1. *Infection with Mites.*—The scabies mite, head lice and body lice.
2. *Fungus Infections.*—Ringworm infection of the scalp, groin and feet.
3. *Bacterial Infections.* — Streptococcal and staphylococcal.
4. *Manifestations of vitamin lack.*

1. INFECTION WITH MITES

The incidence of *scabies* is undoubtedly rising. The disease is acquired by intimate contact with infected persons or with infected clothing. Scabies

is no respector of rank; persons in all walks of life may acquire it, particularly in war time. In France during the last war, most of the troops were infected, in many cases by persons who had picked up the infection while on leave in England. The symptoms of itching varies in different individuals, but is always worse when the patient is warm, particularly at night. If you will make an attempt to learn the sites of election of scabies, you can diagnose most cases. Make an outline of the body and mark with a cross the following points which are the sites of election: Between the fingers, the medial aspect of the wrists, the points of the elbows, the anterior axillary fold, the areola in women, the lower abdomen, the genitals in males, the folds of the buttocks, and the inner aspect of the ankles.

Without entering into great detail, I will mention the types of scabetic lesions which might be found: the scabetic run or vesicle, scratched follicular papules, excoriations and secondary impetigo lesions. If any of these lesions are found at the sites of election scabies can be diagnosed. In most cases, particularly in cleanly people, it is necessary to strip the patients to establish the diagnosis.

The Treatment of Scabies

The time-honoured method of treatment is with sulphur ointment (12 per cent.) after preliminary bathing, using a nail brush and plenty of soap, paying particular attention to the sites of election. The ointment is inuncted thoroughly from the neck downwards each day for three days, after which an ordinary bath is taken, with a change of underclothing. Socks, underclothing, gloves and bed linen should be sterilised by boiling or by steam under pressure.

Treatment with benzyl benzoate paint—benzyl benzoate 100 grams, spiritus saponis kaline 130 gms., spiritus concentratus 60 gms., aqua dest 10 gms.—is a quicker method of treatment, but the paint may be difficult to obtain at present. After preliminary bathing, 75 grams of the paint are applied from the neck down. A similar amount is applied at the end of 12 hours. At the end of 24 hours another bath is taken.

Another rapid method of treatment is with Ung. Potassium Polysulphid B.P.C. After a preliminary thorough washing for 10 minutes with soap over the whole body, the patient lies in a warm bath for 20 minutes. The ointment is then rubbed thoroughly over the whole body, taking 15 minutes over the treatment. The patient then stays in bed for 24 hours, and after another cleansing bath, changes into clean clothing.

PEDICULOSIS

Pediculosis capitis was becoming extremely rare compared to 20 years ago, mainly as a result of education by the School Medical Authorities and its recognition by school medical officers. With the removal of children from the London area (which has a particularly efficient medical service) and the breakdown of supervision, the condition may become more common. The infection gives rise to irritation with scratching and very frequently secondary impetigo follows, the whole scalp becoming heavily crusted. In severe cases the exudation may mat the hair together into smelly ropy masses. The nits are readily seen if the underneath of hairs on the posterior part of the scalp is examined. They are translucent globules, firmly cemented to the hairs so that they cannot be flicked aside, but can easily be slid up and down the hairs. In very heavily infected cases the mite itself is seen.

The lice live on blood which they obtain by piercing the skin. They inject a poisonous material which gives rise to irritation.

Treatment of P. capititis

1. If hair long and thick it is simpler to cut it short.
2. Hair can be washed through with 1 in 40 carbolic and the hair carefully combed through with a fine tooth comb. This can be repeated until all nits have disappeared.
3. Hair can be soaked with oil of sassafras and covered with a linen cap for two days, and then combed free of nits.

PEDICULOSIS CORPORIS

The lice live in the seams of the underclothing, under the belt and collar. They pierce the skin and suck blood. It is found particularly in old people, in encampments, and in the last war almost everyone in the trenches was infected. Scratch marks over the shoulders and buttocks are common.

Pigmentation and thickening of the skin may be present in prolonged infection. Many cases in old people are mistaken for urticaria or senile pruritus. This mistake can be avoided by careful examination of the seams of the undergarments at each visit.

Treatment

1. N.C. I. powder dusted freely into clothing.
2. Crude naphthelene 96 per cent., creosote 2 per cent., iodoform 2 per cent.
3. Clothing should be boiled where practical, or pressed with a hot iron, particularly the seams.
5. Thorough bathing with soap and water.

Pediculosie pubis

This is contracted by close contact with an infected individual or the use of lavatories. It is usually limited to the pubic areas, but may involve hair in armpits and on trunk and limbs. Pediculi may even be found on the eyelashes. It produces irritation, blood crusts are formed and sometimes peculiar pigmented macules over the lower abdomen and thighs.

Treatment

Swabbing with equal parts of benzol and petrol or, to avoid irritation, equal parts of benzene and olive oil applied to affected areas. These applications should be followed by thorough washing.

If eyelashes are affected the nits should be picked off and a 2 per cent. yellow oxide of mercury ointment applied.

Ammoniated mercury ointment is commonly used, but may produce dermatitis, and if this treatment is used, the patient should be under observation for any sign of intolerance.

2. FUNGUS INFECTIONS

Ringworm of Scalp in Children

There may be an increase in the incidence of the condition as a result of lack of medical supervision and free association with carriers.

This condition produces scaly, slightly pink areas on the scalp in children, with short, broken-off, greyish hairs, fluorescing green under the Woods glass. Under the microscope one can see a mosaic of spores on the surface of the hairs, after maceration in 10 per cent. caustic soda.

Treatment

Treatment with thallium acetate or X-rays may be difficult under present circumstances. However, application of Whitfield's ointment will ensure that child is not propagating the disease.

Ringworm of the Groin

Epidermophytosis (Dobie's Itch)

Infection is commonly found in institutions and is produced by the use of infected toilet articles. On one side of the groin a round, slightly scaling area is produced, spreading at the periphery and joining up with other infected patches to form a scalloped pattern.

Treatment

1. Seven days' application of Whitfield's ointment, containing 4 per cent. each of benzoic and salicylic acids, will produce a cure.

Epidermophytosis of the Feet

This is contracted in bathing establishments. It is not usually noticeable in winter, but appears in the summer when the skin is moist and warm, and conditions for growth of the fungus are ideal. There are several types. The intertriginous type usually appears between the fourth and fifth toes, producing a dermatitis with peeling of the horny layer, and spreads to other toes and the soles of the feet. Grouped *eczematous* blisters rupture to produce raw areas with fresh vesicles at the periphery. The more chronic hyperkeratotic type produces scaliness and fissuring of the feet. The palms may also be involved.

Treatment

1. Supervision of washing arrangements and lavatories.

2. Insistence on cleanliness before using a common bath or shower.

3. Application of Whitfield's ointment is usually well tolerated.

4. Where there is peeling or blistering it may be necessary to sooth down the skin first with a lotion containing liquor aluminium acetate dms. *lotio calamine* to the ounce.

5. Plain tincture of iodine is useful in the intertrignous type, followed by powdering with 5 per cent. salicylic acid powder.

3. BACTERIAL INFECTIONS

The common type of *streptococcal* infection is a superficial one known as impetigo. This is a condition which commonly attacks the face, particularly in children, and is spread by the handling of infected toilet articles. It develops on the exposed parts of the body, the face, scalp and exposed areas of the limbs. Infection takes place through a breach in the horny layer, and produces blisters with clear contents, of the size of a sixpence. After a day the blisters rupture, exposing a weeping stratum mucosum which becomes covered with a crust composed of dried serum. The lesions may spread over the face and trunk, in some severe cases forming confluent areas.

Impetigo may arise on otherwise apparently normal skin, but any condition which allows of a breach in the normal horny layer will permit the entry of organisms and secondary impetigo will occur. Again patients with irritable skin conditions who scratch vigorously will produce by trauma the necessary breach in the protective covering. Secondary impetigo is seen as a complication of scabies, and of pediculosis of the scalp and body, and of dermatitis of external origin.

The history and distribution of the impetigo, on top of the changes of dermatitis or eczema to be seen elsewhere, will enable the distinction to be made between primary and secondary impetigo.

Most cases of impetigo clear up quite promptly, under almost any form of treatment. The epidermis becomes immune in between two and three weeks, and the condition then heals spontaneously.

In young adults with abnormally greasy or seberrhœic skins, impetigo of the face may, however, be a persistent disease, the acute stage passing to leave weeping plaques which become crusted and may remain for several months.

There is no doubt that secondary infection with the staphylococcus quickly occurs in most impetigo and this infection plays a part in the formation of chronic infective dermatitis.

The *treatment of impetigo* is simple : to keep the areas clean and dry, and *not* to use ointments in the acute stage, and above all not to use mercurial ointments in any acute impetigo which is at all widespread. It was estimated that in 10 per cent. of war cases treated with mercurial ointment a mercurial dermatitis developed. The serous discharge is, of course, infectious, and the application of grease to the skin allows the discharge to spread underneath it and thus to reach and infect fresh areas of skin. When the crusts are thick, yellow and friable, they may be bathed away once every four hours during the day with a $\frac{1}{2}$ per cent. copper and zinc sulphate solution (Eau d'Alibour) and a drying paste then applied. After a few days the crusts will become less thick and difficulty will be found in removing the paste. This indicates that the exudation is becoming less and the areas are becoming epithelised over. The treatment can then be changed to the application of a simple zinc cream. After about a week the areas will have become epithelised and scaly and a simple calamine and zinc ointment could be substituted. The aniline dyes are sometimes used, but these are I think most useful in the deeper, ulcerated type of impetigo known as " Ecthyma," occurring on the limbs of debilitated children, forming shallow ulcers with purulent bases. In ecthyma the application of mercurial ointments is justifiable.

In cases of confluent impetigo where there are heavily crusted areas, the crusts are best removed by the use of starch poultices which should be frequently changed, and not allowed to dry on.

Staphylococcal Infections

Staphylococcal infection is a frequent accompaniment of impetigo. The elementary lesion is a small papule topped by a yellow point. Where the organisms penetrate more deeply boils and even carbuncles are formed. Factors which may influence the increase in the severity of staphylococcal infections are : absence of washing facilities, close contact with infected individuals, and lack of immunity secondary to lack of sleep, lack of light and lack of fresh green food. Staphylococci with their pathogenicity heightened, fresh from active lesions, may be acquired from the handling of towels or washing utensils.

The *treatment of boils and carbuncles* is well known to you. Here again, I would stress the undesirability of surgery until there is pus to evacuate. This is particularly important in the case of boils on the upper lip or other parts of the face. I have recently read in the *Gazette* a revealing article on " How to Become a Successful Surgeon." One method which these inveterate human experimenters have used for boils on the upper lip, ligation of the angular vein, has been condemned by the author.

Where boils are multiple the best results are obtained by strict bodily cleanliness. Three ounces of zinc sulphate previously dissolved in a little boiling water should be added to each bath, which should be followed by Eau de Cologne rubs and powdering. General artificial sunlight, injections of vaccine, and injections of foreign protein are definite forms of treatment.

4. MANIFESTATIONS OF VITAMIN LACK

Vitamin A lack will affect the normal growth and maintenance of the epidermis. It gives rise to a tendency for infection at the angles of the mouth and of the folds of the skin. The horny layer will be badly formed, producing roughness and dryness of the skin. Cases of Vitamin A lack have been described under the term Xerophthalmia in which there is drying of the cornea which becomes perforated.

Lack of Vitamin B_2 is not likely to occur except under conditions of great privation or where the diet is limited owing to lack of appetite or difficulty in obtaining food.

The skin manifestations of Vitamin C lack are well recognised : purpura, and hæmorrhages with tender swollen gums.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Sector News

Guy's Letter

THE week or so prior to Christmas is never full of events; it is a time of preparation. And if the scale of entertainment at the Hospital must be smaller now than in happier years, there is nothing to suggest inadequacy.

There was yesterday, however, one less common occasion. For two or three days we had heard whispers of coming conclaves of the honorary staff and other principalities and powers. Then on this day as we walked through the Park we saw them, some of whom had not been up from the country for weeks. It was like the corner of Downing Street during the annual August crisis. Our masters stood in little groups, each trying to outdo the other in gravity and importance, each quite uninterested in what the other was saying. As we passed the knots we tried to glean snatches of the conversation, but that was impossible for all was close and confidential. We had walked from Hunt's House to the colonnade steps when we were rewarded. Outside Dorcas we turned to see what had attracted our attention.

A large figure was addressing a trio outside Nuffield House. We thought we should now hear the inside information of the coming deliberations. A gale was blowing against our favour, but as we watched the figure we heard snatches of the oration: "*Old Sir Cooper Perry said in 18—.*" Here the speaker pushed forward his hat over his eyes. Then, "But the modern nurse seems to think——" Here a handkerchief as big as a tent but as gay as the Jack was produced. It was not used but was flapped to accentuate, "ten feet between the beds, see?" Finally, we heard, "Willy Lane used to say—oh! by the way, do you know my views on influenza?" At this point the right arm and forefinger were in full extension in Heaven's direction.

Shortly after the Park was clear; the meeting was in session.

It is a commonplace that war changes fashion. But if the British Army now wears battle dress, why on earth does it follow that a new evening dress should come to Guy's. A visit to the College and, alas! Nuffield House at half-past seven finds some diners dressed in the costume of custom save in one respect—pyjamas like Joseph's coat where the shirt and collar ought to be.

R. T. H.

Pembury Letter

CHRISTMAS festivities at Pembury are probably on a more restricted scale than elsewhere in the sector. There are a number of reasons for this, not least being the inability to produce any form of amateur theatricals. However, we are promised several dances and divers ward parties, which will doubtless add to the gaiety. Of the results achieved, we hope to tell you more anon.

Mr. Kilpatrick is now settled in our midst, and is kept comfortably busy. On his first day with us one of our students, by name Lillywhite, became his first victim. In the past we have known surgeons surreptitiously massage the appendix to give it at least an external appearance of inflammation. Mr. Kilpatrick can now claim to have removed a truly gangrenous "lillywhite appendix."

Several of our Residents have been attending at their "Provincial" Universities, and we trust that they will return to us with many added letters after their names.

And so we bring our Christmas letter to a close. To all Guy's men everywhere we send greetings. May your butter ration grow as visibly as your income tax.

N. M. J.

Farnborough Letter

DESPITE an edict issued by authority of the Medical Superintendent, the Steward and the Matron herself expressing the wish that there "shall be no official Christmas presents this year," the seasonal spirit is relentlessly weaving her spell over the Hospital. Certain of the patients undergoing occupational therapy in the psychiatric department have deserted their billiards and ping-pong and may be seen carrying bundles of foliage through the corridors, the ward clerks in ever-increasing numbers are seeking permission to go away, and the patients in the general wards are growing either restive or expectant. The restive ones are anxious to get home for Christmas; the others have no homes and want to stay for any entertainment that may be going. Christmas cards are popping up and little packets, wrapped in decorative paper, are appearing on lockers and in Sisters' rooms—presumably "unofficial" presents. The idea of a sherry party is being mooted in some circles. Such are the prodromi—attenuated perhaps but unmistakable—of Christmas, 1940, at Farnborough. The florid stage we hope to describe in a later communication.

A week ago the students put on their first revue. The show was presented by Merrick and Trethowan, and the Crofton Hall was filled to capacity

by a responsive audience. The high-light of the evening was a pantomime on the lines of the Residents' Play, in which the principal boy (Mr. Tucker) and the principal girl ( ) were supported by an entertaining company comprising ugly Sisters, hard-drinking students and a fairy Matron. There were also a number of excellent individual turns. One man in particular played many parts ; he was Trethowan, who, in addition to writing the script of the pantomime, found opportunity to appear as a cross-talk comedian and to perform on a great variety of musical instruments, both string and wind. Merrick, though he remained behind the scenes, is to be congratulated upon the smoothness of the production, as is Dhenin for his competent handling of the difficult part of compere.

There has been a certain amount of minor sickness among the community, but only Mrs. Payling Wright has been unfortunate enough to be warded. We are glad to see, however, that she is now about again and we wish her a speedy convalescence. Examinations, too, have rather depleted our numbers of late as we have been supplying both examiners and examinees, but though teaching will be minimal during Christmas week, it should be in full swing by the New Year. V. C.

Reviews

Income Tax for Medical Practitioners. By A. L. BOYDON. Published by Eyre & Spottiswoode. Pp. 147. *Price 6s.*

THIS outline of income tax and surtax law and practice is comprehensive ; but, as it is intended as a guide to members of the medical profession, who presumably are neither lawyers or accountants by training or nature, it is possible that the subject has been dealt with too thoroughly and in too much detail for the unaccustomed mind to follow readily.

For a doctor to know, for example, the intricacies of legal avoidance of taxation may be useful, but to put these schemes into operation requires expert knowledge, and the inclusion of such details in a book of this description might lead to the uninformed attempting some scheme which, far from avoiding taxation, might even attract penalties for the non-disclosure of taxable income. A parallel position would be established if a book entitled, say, " Medicine for the Home," explained to the lay public how to reduce a compound fracture and how to treat it to finality, instead of advising on the first-aid measures which should be adopted.

The remarks above, although a criticism, are also a recommendation, as the subject is covered so completely and with such a wealth of explanation that very few, if any, income tax problems likely to confront a doctor are left unexplained. A particularly noteworthy feature is the number of examples which are completely worked out to show the tax payable in certain given circumstances, so that, even if difficulties are encountered in understanding the text, the additional information required to clarify the position is available.

The book might, viewed from one angle, be considered as a compliment to the medical profession, as the author evidently assumes that medical men will not only be able to follow all the detailed explanations of this involved matter, but will prefer to study the problem for themselves, rather than be given a more simple outline and advised, where more complicated matters are concerned, to seek specialist help and advice elsewhere. B. L. R.

Correspondence

First-Year Students

To the Editor of the GAZETTE

SIR,—We understand that the number of first-year students at Guy's and some other Medical Schools has substantially increased since the outbreak of war. It is hard to understand how this situation can be in the best interests of either the country or the medical profession, and we feel it requires an explanation.

At present able-bodied young men are allowed to embark on a five and a half year course of study, whilst the nation is engaged in the most critical struggle in her history. Unless the war lasts for six years, which is unlikely, these students will not have contributed directly to the war effort and, moreover, there will be a flood of newly-qualified doctors in the immediate post-war years. The objection will be raised that there will, on the contrary, be a shortage of doctors, but demobilisation will amply meet these needs. We are fighting an enemy numerically superior to ourselves ; surely everyone, except those within sight of qualification, should be in the fighting services ?

In some cases there must be a personal element at work to cause this increase, namely, the unwillingness of a certain type of young man on leaving school to enter the Forces or an unreserved occupation, which would render him liable for military service later.

Even before the war there was a tendency at Guy's towards overcrowding in the clinical period. This, besides adding to the congestion in the Hospital, lowered the efficiency of teaching, since personal contact between teacher and student became less close, and the number of beds allocated to each student decreased. This state of affairs has been aggravated by the war. We can well understand the diminution in the amount of teaching and the number of cases, but fail to see why, at the same time, the number of students admitted is rising. The result will be the turning out of ill-trained doctors, nurtured too much on books and too little on bedside experience. In consequence the high standards and good reputation of Guy's and the rest of the medical profession will be undermined.

The solution of this problem can be reached in two ways, of which the second is but a half-solution and ancillary to the first. They are these :—

1. That the number of entering students should be reduced, and those wishing to enter should be chosen not only by their academic achievements, but also with a view to their suitability as good doctors.

2. That the students in their clinical period should be distributed over more hospitals in the sector in order that they might gain more and varied clinical experience.

Yours, etc.,

P. R. C. EVANS.
G. E. McCALL.
G. HAVELOCK PEARSON.
J. PINCHING.
P. E. STEELE-PERKINS.
P. N. SWIFT.

Guy's Hospital, S.E.1.

Sport

Rugby

Guy's v. King's College Hospital

(At Honor Oak Park on Saturday, November 9th)

GUY'S returned to winning form when they entertained King's College Hospital. Scheduled to start at 2.30 p.m., there was a delay of 45 minutes owing to travel difficulties. Once again there was a fair wind, this time towards the pavilion, of which Guy's had the advantage in the first half. The conditions were not good, as the rain gave the impression that the ball would be difficult to handle. However, once the teams got under way, it was evident that King's were determined to make it a forward game, and in this they succeeded. Harrett had a gruelling time at the base of the scrum, owing to the close attentions of King's back row forwards. As a result, Guy's outsides did not get many opportunities.

King's were the first to score, when in one of their many forward rushes Milne succeeded in getting the touch down from a scramble, and Young converted. Guy's first-half score came from a similar rush by the forwards, which ended in Mullins touching down and converting. With the half-time score at five all, Guy's appeared to be up against it.

From the start of the second half, Guy's forwards took command. Sharpe had the best of the hooking; Mullins was an outstanding forward, and was well supported by the rest of the pack. Harrett had many chances of getting the ball away, and he was helped by the forwards occasionally holding the ball, which neutralised the breaking of King's wing forwards.

Guy's scored fifteen points in this half. Kynaston made a beautiful cut through to send Camp over in the corner. Everall, backing up well, scored an easy try, following an excellent run by Mullins, who had intercepted a faulty King's pass. Kynaston again carved the way, this time for Gartrell to touch down by the corner flag. Then followed a Guy's forward rush, and some excellent dribbling resulted in Wiggins scoring a try. None of these tries were converted, although two were in front of the posts. The scoring ended with Mullins kicking a penalty goal from a long angle.

Final score : Guy's, a goal, a penalty goal and four tries (20 points); King's College Hospital, a goal (5 points).

Team.—T. L. T. Lewis ; R. F. Camp, J. Breen-Turner, R. U. F. Kynaston (Captain), P. C. Gartrell; D. M. Strathie, P. D. V. Harrett; J. P. Rochford, R. M. Sharpe, J. D. Everall, A. G. Albers, C. Vidot, M. R. Mullins, T. W. Renton, A. E. M. Wiggins.

Guy's v. St. Mary's Hospital

(*At Teddington on Saturday, November 16th*)

FROM Guy's point of view this was a most disappointing result. From the start of the game until ten minutes from the end, not only did they put the Mary's back division out of gear, but exerted much pressure which caused Mary's many anxious moments. Guy's defence was excellent—that goes for the whole of the team—but they collapsed completely towards the end and Mary's had no difficulty in piling up the score. Kemp was in brilliant form throughout the game, and was greatly helped by his forwards and Cockburn, who had the ball from practically every scrum.

The first half went slightly in favour of Mary's; they tried hard to get their three-quarters moving smoothly, but were allowed no quarter as the Guy's tackling spoilt all their movements. Guy's did enough pressing to raise hopes of a score, and in one of their excursions into the opponents' territory Mary's were penalised and Mullins put Guy's ahead with an excellent kick.

Mary's set about the task of neutralising the Guy's lead, and Skempton succeeded in going over for a good try which McCrae converted.

The second period was full of exciting incidents, and Mary's were never allowed to settle down. Kemp was constantly breaking through, but his three-quarters were compelled to pass hurriedly or were tackled in possession. It was Kemp who put Mary's further ahead following a brilliant solo run and dodging several players who attempted to tackle him, but his try was not converted.

Guy's still had a chance to pull the game round and made many determined attacks, but Mary's gradually got well on top and eventually, about ten minutes from the end, Craddock crossed for an unconverted try. Then came the Guy's collapse. Mary's had no difficulty in adding to their score, and tries came from Cockburn and Jacklin, and the same two players each kicked a goal.

Result: Guy's, a penalty goal (3 points); St. Mary's, three goals and two tries (21 points).

Team.—T. L. T. Lewis; R. F. Camp, J. Breen-Turner, R. U. F. Kynaston (Captain), P. C. Gartrell; D. M. Strathie, P. D. V. Harrett; J. P. Rochford, R. M. Sharpe, C. Vidot, A. G. Albers, J. D. Everall, M. R. Mullins, T. W. Renton, A. E. M. Wiggins.

Guy's v. Aldershot Command

(*At Aldershot on Saturday, November 23rd*)

ALDERSHOT COMMAND were weakly represented and Guy's had no difficulty in winning by 16 points to 3 points. Guy's were a forward short until close on half-time, but they had all the best of the first half. Strathie was in grand form throughout the game, and was constantly getting his three-quarters on the move. He made a nice opening for Camp to open the scoring for an early try which was not converted.

Some accurate passing enabled Camp to score again, and Mullins added the extra points. Camp completed his hat-trick when he went over for an unconverted try, following some clever work by Kynaston.

The second half was quite a different story; the Command's three-quarters improved greatly, and play was more even. Guy's three-quarters carried out some excellent passing which led to a try by Gartrell, Mullins converting.

Aldershot Command scored their solitary try through Cross, following a fine break through by Hampton. Guy's had several chances of increasing their score, but the Command's determined tackling was responsible for many movements petering out.

Score: Guy's, 2 goals, 2 tries (16 points); Aldershot Command, 1 try (3 points).

Team.— —. Harris; R. F. Camp, J. Breen-Turner, R. U. Kynaston (Captain), P. C. Gartrell; D. M. Strathie, N. I. Scott; J. P. Rochford, R. M. Sharpe, J. D. Everall, A. G. Albers, C. Vidot, M. R. Mullins, T. W. Renton, A. E. M. Wiggins.

Guy's v. St. Bartholomew's Hospital

(*At Honor Oak Park on Saturday, November 30th*)

THE return game with Bart's ended all square with ten points each after an exciting struggle. Indeed, so well did Bart's play that Guy's must consider themselves fortunate in sharing the spoils, in spite of the fact that they had the ball from nearly every scrum, although it was a pity Mullins was crocked in the course of the game.

Bart's set about their task in a businesslike manner, their forwards playing remarkably well, and they took the lead through McAffee, who dropped a goal.

Following this, Guy's attacked and some good kicking by the backs led to Mullins scoring an unconverted try. Bart's were not to be denied and increased their lead before the interval with a try by Evans.

The second half was very spirited with plenty of excitement, and Guy's had a job in holding their opponents, but could not prevent Campbell going over for a try to give Bart's a lead of seven points. Guy's reduced the lead when Gartrell raced over for a try which was not converted.

When all seemed lost Guy's pressed hard and within a few minutes from the end Strathie pulled the game out of the fire with a neat drop goal from close in.

Score: Guy's, 1 dropped goal and two tries (10 points); Bart's, 1 dropped goal and two tries (10 points).

Team.—T. L. T. Lewis; R. F. Camp, J. Breen-Turner, R. U. F. Kynaston (Captain), P. C. Gartrell; D. M. Strathie, N. I. Scott; J. P. Rochford, R. M. Sharpe, J. D. Everall, A. G. Albers, C. Vidot, M. R. Mullins, T. W. Renton, A. E. M. Wiggins.

Guy's v. Rosslyn Park

(*At Honor Oak Park on Saturday, December 7th*)

NOBODY could have wished for a more enterprising and open game than this, the result of which was in doubt right up to the final whistle, and the vocal support given to both sides was evidence that the spectators were as much keyed up as the players.

In recent games Guy's have been compelled to make several changes in the pack, and have not been so effective as in the earlier matches, but no fault could be found with them in this game. Sharpe's hooking was again excellent, especially in the opening stages. Once again Strathie was the pivot on which the Guy's team worked, a word of praise must be given to Scott at scrum half, Brangwin at right centre came through his first team baptism with credit, and Lewis was a sound and solid full back. There was much improvement in the three-quarter line, but still showing a tendency of being too orthodox, and one sighs for that short sharp punt ahead when they are boxed in, or a judicious cross-kick, which is always so helpful in maintaining the attack.

Guy's started well and got the ball from most of the set scrums, but after the first ten minutes the Park gradually assumed command, although Guy's were the first to score from a penalty taken by Kynaston.

The Park were playing very well and it was no surprise when Lowe took a high pass on our line to touch down, which he converted. The Park went further ahead when Lumby scored following a brilliant solo run, Lowe again adding the extra points, for the Park to lead by 10 points to 3 points at half-time.

Following some exciting movements by both sides, Unwin was placed in possession and his speed carried him over the line for an unconverted try.

The form of Guy's from now on was a revelation. They carried the play into their opponents' territory and only some determined tackling kept them out. A splendid movement by the three-quarters got the ball to Camp, who seemed completely shut in, but he broke away miraculously and scored one of the best tries of the season, Kynaston obliging with the goal points.

Continuing to have the upper hand, Guy's were again on the Park line and Renton pounced on a loose ball to score near the posts, Kynaston again obliging with the extra points.

With the scores level, Guy's almost went over again, but were held up on the Park's line. Not to be denied the Park made valiant efforts to get the ball to Unwin, and eventually Steele succeeded for Unwin to score an unconverted try in the corner. Thus ended the best game seen at Honor Oak Park this season.

Score: Guy's, 2 goals and a penalty goal (13 points); Rosslyn Park, 2 goals and 2 tries (16 points).

Team.—T. L. T. Lewis; R. F. Camp, H. R. Brangwin, R. U. F. Kynaston (Captain), P. C. Gartrell; D. M. Strathie, N. I. Scott; J. P. Rochford, R. M. Sharpe, J. D. Everall, A. G. Albers, J. Matthews, A. E. M. Wiggins, G. M. Evans, T. W. Renton.

Hospital Information, etc.

Notice

SOCIETY OF APOTHECARIES OF LONDON

The Society's Examinations for January are as follow:—

Surgery.—January 13th, 15th, 16th.

Medicine, Pathology and Forensic Medicine.—January 20th, 22nd, 23rd.

Midwifery.—January 21st, 22nd, 23rd, 24th.

Prisoner of War

Lieut.-Colonel George Trevor Hankey, R.A.M.C.

Births

BATCHELOR.—On December 7th, at Dunedin, New Zealand, the wife of J. S. Batchelor, F.R.C.S.—a son.

GRIFFITHS.—On December 8th, 1940, at Ivy House, Devizes, to Joan (née Geddes), wife of Dr. J. A. T. Griffiths, of Leaton Prestatyn—a son.

LIDDELOW.—On December 18th, 1940, at Leasingham Manor, Sleaford, Lincs., to Joan (née Short), wife of Flight-Lieut. K. P. Liddelow, R.A.F.V.R., L.D.S., R.C.S. (Eng.)—a daughter.

SPERRYN-JONES.—On December 11th, 1940, at Sidmouth, wife of Captain G. Sperryn-Jones, A.D. Corps—a daughter.

Marriage

WAKEFORD—MILTON.—On December 7th, 1940, at St. Margaret's Church, Wellow, Leonard Albert Wakeford, Lieut. A.D. Corps, to Maxine Rundle Milton.

Death

DELBRUCK.—On December 15th, 1940, at Newquay, Cornwall, suddenly, after a road accident, Raoul Ernest Delbruck, M.B. Cantab., of 142, Cromwell Road, S.W.7.

EDS. {N.A.N. B.S.L.